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Subracks/ 19" chassis ... 6

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Appendix 12



Systems

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AdvancedTCA



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VME-, VME64x-, VXS-, VPX-bus . 8.88
System accessories Backplanes/ bridges10.0 Guide rails6.38 Plug-in units with extractor handle7.18 Air baffles6.61 Mezzanine front panels7.12 Fan Control Modules (FCM) 8.106 Chassis monitoring modules (CMM)8.107 19" power supplies9.0 Equipment cables3.38 Drive unit modules8.108

36106008 (12310002 12312001 123006003 10006002 10002010 100112001 3040205

Overview 0

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Systems - AdvancedTCA



12707010

Everything a system needs.

Schroff's AdvancedTCA systems make the development of new, forward-looking tele-communications installations with high data-processing rates as simple for you as possible.

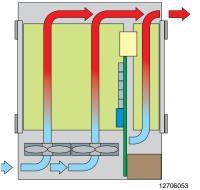
We offer everything on the basis of the AdvancedTCA specification that you have come to expect from a Schroff complete system Excellent mechanics, optimised cooling, reliable power supply, efficient data distribution and secure system management.

But that is not all:

As a matter of course, our complete systems are also available in shock and vibration-resistant versions with UL certification.

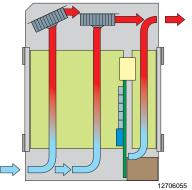
With Schroff, AdvancedTCA means matured products and wide ranges of options:

- Dimensions from 2 to 14 U
- 2 to 16 slot installations
- Cooling concepts (push, pull, push-pull)
- Backplane topologies (dual star, full mesh)
- Shelf manager based on Pigeon Point technology



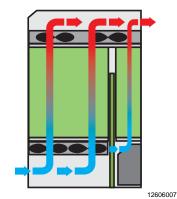
Push cooling

The fans are situated near the air inlet and push the air through the system.



Pull cooling

The fans are situated near the air outlet and suck the air through the system.



Push-Pull

The fans are situated below and above the board cage for maximum airflow and optimal redundancy.

Appendix 12



Downloads and further important information can be found on the Internet under www.a-tca.com and www.schroff.biz

Systems and components available world-wide

■ Very wide product range with regard to dimensions, number of slots, cooling designs, backplane topologies and shelf managers; all completely assembled and tested



- NEBS ready, UL recognized
- For mounting in ETSI, 19" or 23" cabinets
- Cooling up to 400 W per board





12705006 12705005

AdvancedTCA systems

- 2 ... 14 U; 2 ... 16 slot
- Backplane with dual star, full mesh topology, 15-fold connected fabric interface with hub/hub or node/node configuration; bussed or radial IPMB
- Push, pull or push-pull cooling
- Shelf manager based on Pigeon Point technology



AdvancedTCA accessories

- Front panels and handles
- Shelf manager based on Pigeon Point technology
- Backplane



ServicePLUS from page 8.112

e.g. individual configuration and assembly

e.g. modifications (integration)

e.g. downloads (CAD drawings, user manuals, test reports)

e.g. custom solutions

www.schroff.biz/ServicePLUS

Systems

2 U, 2 slot DC version, without rear I/O. 8.4 with rear I/O 8.5 5 U, 6 slot 8.6

12 U, 14 slot 8.7 13 U, 14 slot 8.8 13 U, 16 slot,

96 HP 8.9 14 U, 14 slot, next generation . 8.10

Accessories... 8.11

Field replaceable units (FRUs) .. 8.20

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Main Catalogue

E 10/2012



Front view

15	
14	
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14 13 12 11 10 9 8 8 7 6 5 4 4 3 2 1 1 16 15 14 13 12 11 10 9 8 8 7 7 6 6 7 7 6 8 8 8 7 7 7 8 8 8 8 7 7 7 8 8 8 8	
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4	
3	

Node/node configuration



ServicePLUS see page 8.112

12612050

2 U, 2 slot, without rear I/O

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 3.0
- Perfect configuration for a move to AdvancedTCA
- 2 slot backplane, 15x connected fabric interface, node/node configuration
- Two hot-swap fan trays for up to 200 W cooling per slot, airflow from right to left (push-pull cooling)
- Power terminal with fuse (PEM) -48 V_{DC}
- No shelf manager is required

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, zinc-plated, 2 U, 84 HP, 382 mm deep, front with overlays, black, RAL 9005, with 2 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards
2	1	Backplane, 2 slot, 15x connected fabric interface, with node/node configuration (base channels are connected)
3	1	Power terminal with fuse (PEM) -48 V _{DC}
4	2	Fan tray
5	1	Air filter

Order Information

AdvancedTCA system	Backplane type	Part no.
2 U, 2 slot, without rear I/O	15x connected fabric interface, node/node configuration, bussed IPMB	11596-088
Accessories		
PSU, AC/DC, 850 W/500 W (230 V/115 V) 1 piece 21596-370		
Front panels and handles		Page 8.12
AdvancedMC carriers	Page 8.26	
Replacement parts (FRUs)		
Air filters - page 8.23	21596-515	

Note

■ Modified systems available on request





Front view

Node/node configuration

Hub/hub configuration



ServicePLUS see page 8.112

2 U, 2 slot, with rear I/O

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 3.0
- Perfect configuration for a move to AdvancedTCA
- 2 slot backplane, 15x connected fabric interface; two versions: Node/node or hub/hub configuration
- Two hot-swap fan trays for up to 200 W cooling per slot, airflow from right to left (push/pull cooling)
- One power terminal with fuse (PEM) -48 V_{DC}
- Two shelf managers and one SAP (shelf alarm panel) may be fitted

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack, St, zinc-plated, 2 U, 84 HP, 382 mm deep, Front with overlays, black, RAL 9005, with 2 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards, rear 8 U, 6 HP, 70 mm deep
2	1	Backplane, 2 slot, 15x connected fabric interface; node/node configuration: base channels are connected hub/hub configuration: base channel 1 cross connected to the shelf managers, base channels 2-15 are connected directly to one another
3	1	Power terminal with fuse (PEM) -48 V _{DC}
4	2	Fan tray
5	1	Air filter

Order Information

AdvancedTCA system	Backplane type	Part no.
2 U, 2 slot,	15x connected fabric interface with hub/hub configuration, bussed IPMB	11596-090
with rear I/O	15x connected fabric interface with node/node configuration, bussed IPMB	11596-107
Accessories		
Shelf manager	(bussed), 1 piece	21596-300
Front panels and handles		Page 8.12
AdvancedMC carriers		Page 8.26
Replacement	parts (FRUs)	
Shelf alarm panel, 1 piece		21596-077
PSU, AC/DC, 850 W/500 W (230 V/115 V) Chassis, height 48 mm, width 316 mm, depth 102 mm, input 90 264 V _{AC} ; output 48 V _{DC} , 15.7/9.3 A (230/115 V _{AC}); 1 piece		21596-370
Equipment cables Page 3		Page 3.38
Air filter - page 8.23		21596-515





Front view



ServicePLUS see page 8.112

5 U, 6 slot, with PEM

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 3.0
- 6 slot backplane with triple replicated mesh topology, 40 Gbps transmission rate (4 x 10 Gbps), radial or bussed IPMB with inserted FRU SEEPROM
- Two hot-swap fan trays (with 6 fans each) for over 350 W cooling per slot, airflow from right to left (push-pull cooling)
- Two redundant power entry modules (PEMs) for supply voltage -48 V_{DC}/-60 V_{DC}
- Power distribution to backplane via two redundant power branches, separately protected by 30 A circuit breakers
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 and one shelf alarm panel (SAP)



Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, zinc-plated, 5 U, 84 HP, 464 mm deep, front with overlays, black, RAL 9005, with 6 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards, rear 8 U, 6 HP, 70 mm deep
2	1	Backplane, 6 slot, triple replicated mesh, 2 hub slots, 4 node slots
3	2	Redundant -48 V_{DC} /-60 V_{DC} power entry module (PEM) with circuit breaker
4	2	Hot-swap fan tray with 6 fans each to cool the boards (> 350 W/board); filter mat
5	2	Front panel; space to accommodate shelf manager
6	1	Front panel; space for fitting shelf alarm panel (SAP)

Order Information

AdvancedTCA	Backplane type	Part no.	
system			
	Triple replicated mesh, 40 Gbps,	11500 100	
5 U, 6 slot,	bussed IPMB	11596-160	
with PEM	Triple replicated mesh, 40 Gbps,	11500 101	
	radial IPMB	11596-161	
Accessories			
Shelf manager	(bussed) 1 piece - page 8.18	21596-300	
Shelf manager	(radial) 1 piece - page 8.18	21596-301	
Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m,			
1 piece; page 8.18			
Front panels and handles Page 8.12			
AdvancedMC carriers Page			
Replacement	parts (FRUs)		
Power entry m	21990-058		
Fuse 30 A/80 V for power entry module, PU 10 pieces 21191-20			
Shelf alarm panel (SAP)		21596-077	
Fan tray - page 8.21 21990-05			
Air filter - page 8.23 21990-059			
	·		

■ Modified systems available on request





Front view



ServicePLUS see page 8.112

12 U, 14 slot, with PEM

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 2.0
- 14 slot backplane with dual star or full mesh topology
- Two redundant power entry modules (PEM) for supply voltage -48 V_{DC}/-60 V_{DC}
- Redundant hot-swap fan trays for up to 250 W cooling per slot, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB topology



Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, 12 U, 84 HP, 383 mm deep; powder-coated, black, RAL 9005; with 14 horizontal slots for 8 U, 6 HP, 280 mm deep AdvancedTCA boards, rear 8 U, 6 HP, 70 mm deep; cable channel at front and rear
2	1	Backplane, 14 slot
3	2	Redundant -48 V_{DC} /-60 V_{DC} power entry module (PEM), plugged in on the rear, with 4 pairs of lines each per input (8 fuses, 30 A)
4	1	Fan unit at bottom; 3 redundant fan trays with 330 m ³ /h (195 cfm) each, with 2 fans each to cool the front and rear I/O boards Filter mat
5	1	Shelf alarm panel (SAP)
6	1	Cover for shelf manager slot (enclosed loose)
7	2	Mounting bracket, for assembly in 19" cabinets

Order Information

AdvancedTCA system	Backplane type	Part no.			
12 U, 14 slot,	Dual star, 25 Gbps, bussed IPMB	11596-300			
with PEM	Full mesh, 25 Gbps, radial IPMB	11596-303			
Accessories					
Shelf manager (b	ussed) 1 piece - page 8.18	21596-300			
Shelf manager (ra	adial) 1 piece - page 8.18	21596-301			
	Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18				
Adaptor 12 U RAL 9005, from 19" to ETSI, PU 1 kit 21596-27					
Adaptor 12 U RAL 9005, from 19" to 23", PU 1 kit 21596-2					
Front panels and handles Page 8.					
AdvancedMC car	Page 8.26				
Replacement parts (FRUs)					
Chassis Data Module - page 8.25 2159					
Power entry mod	21596-003				
Fuse 30 A/80 V for power entry module, PU 10 pieces 21191-20					
Shelf alarm panel	21596-022				
Fan tray - page 8.21 2159					
Air filter - page 8	Air filter - page 8.23 21596-00				
		-			

Note

■ Modified systems available on request



Front view



ServicePLUS see page 8.112

13 U, 14 slot, with PEM

- In accordance with AdvancedTCA Standard PICMG 3.0 Rev.3.0
- 14 slot backplane with dual star topology (bussed or radial IPMI, 40 Gbps) or with full mesh topology, radial IPMI (25 Gbps)
- Two redundant power entry modules (PEM) for supply voltage -48 V_{DC}/-60 V_{DC}
- Redundant hot-swap fan trays for up to 300 W cooling per slot, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP) and shelf alarm display (SAD)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB





Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" subrack system, St, 13 U, 84 HP, 383 mm deep; powder-coated, black, RAL 9005; front 14 slot, 8 U, vertical board mounting, boards 6 HP, 280 mm deep, rear 6 HP, 70 mm deep; cable channel at front and rear
2	1	Backplane, 14 slot
3	2	Redundant power entry module (PEM), -48 V_{DC} /-60 V_{DC} , plugged in at rear, with 4 pairs of lines each per input (8 fuses, 30 A)
4	1	Fan unit at top; 3 redundant fan trays with 400 m ³ /h (230 cfm) each, with 2 fans each to cool the front and rear I/O boards; filter mat
5	1	Shelf alarm panel (SAP)
6	1	Shelf alarm display (SAD)
7	2	Mounting bracket, for assembly in 19" cabinets

Order Information

AdvancedTCA system	Part no.			
13 U, 14 slot,	Dual star, 40 Gbps, bussed IPMB	11990-600		
with PEM	Dual star, 40 Gbps, bussed IPMB	11990-601		
WIGHT LIVI	Full mesh, 25 Gbps, radial IPMB	11990-603		
Accessories				
Shelf manager (bussed) 1 piece - page 8.18	21596-300		
Shelf manager (radial) 1 piece - page 8.18	21596-301		
	Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18			
Mounting bracker PU 1 kit	21596-278			
Front panels and	Page 8.12			
AdvancedMC carriers		Page 8.26		
Replacement p	parts (FRUs)			
Chassis Data Mo	odule - page 8.25	21596-023		
Power entry mo	dule (PEM) - page 8.21	21596-020		
Fuse 30 A/80 V f	or power entry module, PU 10 pieces	21191-207		
Shelf alarm pane	21596-140			
Shelf alarm disp	Shelf alarm display (SAD) - page 8.24			
Fan tray - page	8.22	21990-184		
Air filter - page	21596-138			

Note

■ Modified systems available on request



Front view



ServicePLUS see page 8.112

13 U, 16 slot, 96 HP, with PEM

- In accordance with AdvancedTCA specification PICMG 3.0 rev. 2.0
- 16 slot backplane with dual star or full mesh topology
- Two redundant power entry modules (PEM) for supply voltage -48 V_{DC}/-60 V_{DC}
- Redundant hot-swap fan trays for up to 300 W cooling per slot, airflow from bottom front to top rear; air filter exchangeable from front
- Shelf alarm panel (SAP); Shelf alarm display (SAD)
- Prepared for two Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB topology



Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description					
1	1	Shielded 19" subrack system, St, 13 U, 96 HP, 383 mm deep, powder-coated, black, RAL 9005; with 16 horizontal slots for 8 U, 6 HP, 280 mm deept AdvancedTCA boards, rear 6 HP, 70 mm deep; cable channel at front and rear					
2	1	Backplane, 16 slots					
3	2	Redundant -48 V_{DC} /-60 V_{DC} power entry module (PEM), plugged in at rear, with 4 pairs of lines each per input (8 fuses, 30 A)					
4	1	Fan unit at top; 3 redundant fan trays with 390 m ³ /h (230 cfm) each, with 2 radial fans each to cool the front and rear I/O boards; filter mat					
5	1	Shelf alarm panel (SAP)					
6	1	Shelf alarm display (SAD)					
7	2	Mounting bracket, for assembly in ETSI racks					

Order Information

Order Illiorillati					
AdvancedTCA system	Backplane type	Part no.			
13 U, 16 slot,	Dual star, 40 Gbps, bussed IPMB	11592-500			
96 HP, with PEM	Full mesh, 25 Gbps, radial IPMB	11592-503			
Accessories					
Shelf manager (bus	ssed) 1 piece - page 8.18	21596-300			
Shelf manager (rad	lial) 1 piece - page 8.18	21596-301			
Cable Cat 5 plug - I 1 piece; page 8.18	Cable Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece; page 8.18				
Mounting bracket 1 RAL 9005, from ETS	21596-327				
Front panels and h	Page 8.12				
AdvancedMC carri	Page 8.26				
Replacement par	rts (FRUs)				
Chassis Data Modu	ule - page 8.25	21596-023			
Power entry modul	le (PEM) - page 8.21	21596-020			
Fuse 30 A/80 V for	power entry module, PU 10 pieces	21191-207			
Shelf alarm panel (21596-140				
Shelf alarm display	Shelf alarm display (SAD) - page 8.24				
Fan tray	Fan tray				
Air filter - page 8.2	Air filter - page 8.23				

Note

■ Modified systems available on request

AdvancedTCA 450/40 series chassis, 14 slot,

- 40 G backplane with 14 slots, dual star topology, 2 versions: bussed and radial IPMB
- 450 W cooling capacity per slot at an ambient temperature of 55 °C
- -48 V_{DC} /-60 V_{DC} input voltage, two redundant power entry modules (PEM)
- 2 redundant hot-swap fan trays in push-pull configuration, airflow from bottom front to top rear; air filter exchangeable from front
- Prepared for 2 x Schroff shelf managers with Pigeon Point ShMM 500 for bussed or radial IPMB topology
- UL recognized, E229721 type T08
- Conforms to AdvancedTCA standard PICMG 3.0 Rev.3.0



Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" plug-in units, St, 14 U, 84 HP, 383 mm deep, powder coated, black, RAL 9005; with 14 vertical slots at front for 8 U, 6 HP, 280 mm deep AdvancedTCA boards; 14 vertical slots at rear, 8 U, 6 HP, 70 mm deep; cable channel on front and rear
2	1	Backplane, 14 slots
3	2	Redundant power entry module (PEM) -40 \dots -72 V_{DC} , inserted at rear, with 2 pairs of lines per input
4	1	Fan tray at top with 6 fans, each 565 m ³ /h (336 cfm)
5	1	Fan tray at bottom with 6 fans, each 565 m ³ /h (336 cfm)
6	1	Telco alarm panel integrated in the bottom fan drawer
7	1	Air filter, can be changed from the front
8	2	Mounting bracket, for assembly in 19" cabinets

Order Information

AdvancedTCA	Dealmlane tune	Part no.
	Backplane type	Part no.
system		
AdvancedTCA 450/40 series chassis, 14 slot,	Dual star, 40 Gbps, bussed IPMB	11990-100
DC	Dual star, 40 Gbps, radial IPMB	11990-101
Accessories		
Shelf manager (busse	ed) 1 piece - page 8.18	21596-300
Shelf manager (radia	1) 1 piece - page 8.18	21596-301
Cable RJ 45 Cat 5 plu 1 piece; page 8.18	23204-187	
Front panels and han	Page 8.12	
AdvancedMC carriers	Page 8.26	
Replacement parts	(FRUs)	
Chassis Data Module	- page 8.25	21990-226
Power entry module ((PEM) - page 8.21	21990-224
Fuse 30 A/80 V for pov	21990-225	
Ean tray nage 9.22	21990-227	
Fan tray - page 8.23	21990-228	
Air filter - page 8.23	21990-229	

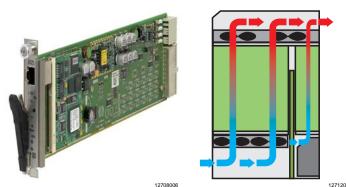
■ Modified systems available on request



For further information www.schroff.biz/oneclick oneClick search code = Part no.



Front view



Accessories: optional shelf manager

Push-pull cooling



ServicePLUS see page 8.112



Accessories overview

- Front panel reinforced with die-cast end piece and IEA handle with spring loading, see from page 8.12

 - KitIndividual configuration
- Front panel and IEA handle without spring loading, see from page 8.14
 - Kit
 - Individual configuration (Al or stainless steel) with/without spring loading
- AdvancedTCA front panels with integrated side two cover, see page 8.16
- AdvancedTCA air deflectors, filler panels, see page 8.17
- Shelf managers, see page 8.18
- Backplanes, see page 8.19
- Replacement parts field replacement units (FRUs), see from page 8.20

Front panel reinforced with die-cast end piece and IEA handle with spring loading

- Schroff hot-swap handle (when open, the spring loading aids the complete opening of the handle and thus facilitates the insertion of the board)
- Front panel: aluminum or stainless steel, reinforced by the diecast end piece (increases robustness of front panel)
- Versions for 2 microswitch types (plunger or lever contact)
- EMC textile gasket

Delivery comprises (Kit)

	•	• • •
Item	Qty	Description
1	1	Front panel
3	2	Die-cast endpiece, alignment pin, knurled screws M3
2	1	Lower IEA handle incl. bearing, spring assisted, (pre-fitted as transport securing device)
4	1	Upper IEA handle incl. bearing, spring-assisted, (pre-fitted as transport securing device)
5	1	EMC gasket, length 299 mm
6	1	Fixing material kit and user manual

Order Information

Height Width U HP		Front panel reinforced with die-cast end piece and IEA handle with spring loading	Part no.		
8	6	Stainless steel, with AdvancedTCA IEA handle (plunger type)	20818-160		
8	6	Stainless steel, with AdvancedTCA IEA handle (lever type)	20818-161		
8	6	Al extrusion, 1 mm, with AdvancedTCA IEA handle (plunger style)	20818-169		
8	Al extrusion, 1 mm, with AdvancedTCA IEA handle (lever style)				
Access	ories				

AdvencedTCA handle (IFA) decima elem

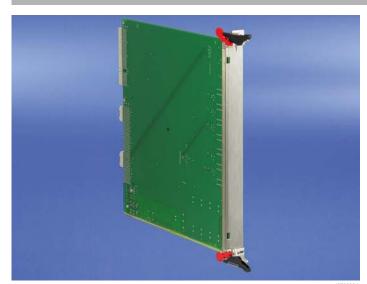
Advanced I CA nandle (IEA) design element	
Plastic, transparent, to clip on, for customers' logos,	20818-140
UL 94 V-0, PU 10 pcs	

Note

- Front panels with copper-beryllium gasket (CuBe) available on request
- Front panels with board cover on request
- With its front panel service Schroff offers extensive modification options, including custom cut-outs, foils and screen printing, www.frontpanelexpress.eu
- Intuitive Ergonomic Aesthetic = IEA handle
- CAD data: please enter part number under www.schroff.biz/oneclick/

FRONT PANEL **EXPRESS**

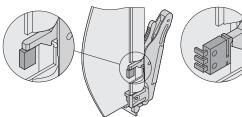




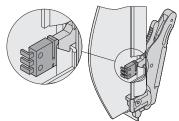
Delivery excludes board



AdvancedTCA spring-loaded IEA handle



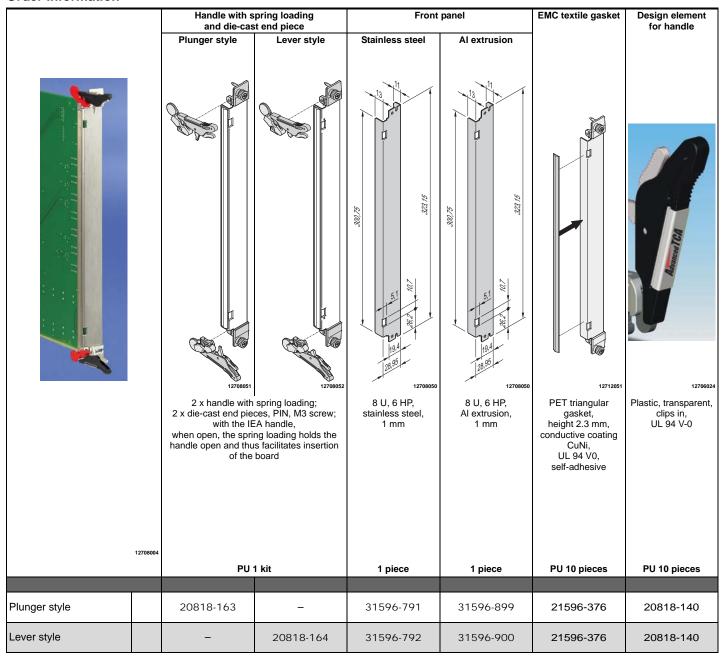
Handle with plunger contact (plunger style)



Handle with lever contact (lever style)

Configuration: Front panel reinforced with die-cast end piece and IEA handle with spring loading

Order Information



Note

■ Intuitive Ergonomic Aesthetic = IEA handle



Front panels and IEA handle (without spring loading) Schroff hot-swap handle (when open,

- Schroff hot-swap handle (when open, the handle must be held in the open position)
- Stainless steel front panel
- Versions for 2 microswitch types (plunger or lever contact)
- EMC textile gasket

Delivery comprises ((kit))

Item	Qty	Description
1	1	Stainless steel or Al extrusion front panel incl. alignment pin and M3 knurled screws
2	1	Lower handle incl. bearing
3	1	Upper handle incl. bearing
4	1	EMC mesh gasket
5	1	Fixing material kit (M2.5 screws incl. thread locking compound)

Order Information

UL 94 V-0, PU 10 pcs

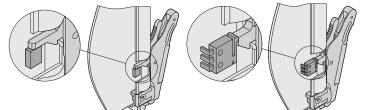
Height Width U HP		Front panels and IEA handle (without spring loading)	Part no.			
8	6	Stainless steel, with AdvancedTCA IEA handle (plunger type)	21596-324			
8 6		Stainless steel, with AdvancedTCA IEA handle (lever type)	21596-325			
Access	Accessories					
AdvancedTCA handle (IEA) design element						
Plastic, transparent, to clip on, for customers' logos, 20818-140						

Note

- Al front panel available through individual configuration service
- Front panels with copper-beryllium gasket (CuBe) available on request
- Front panels with board cover on request
- With its front panel service Schroff offers extensive modification options, including custom cut-outs, foils and screen printing: www.frontpanelexpress.eu
- Intuitive Ergonomic Aesthetic = IEA handle
- CAD data: please enter part number under <u>www.schroff.biz/oneclick/</u>

FRONT PANEL

EXPRESS



Left: application example; right: scope of delivery without board

Handle with plunger contact (plunger style)

AdvancedTCA IEA handle

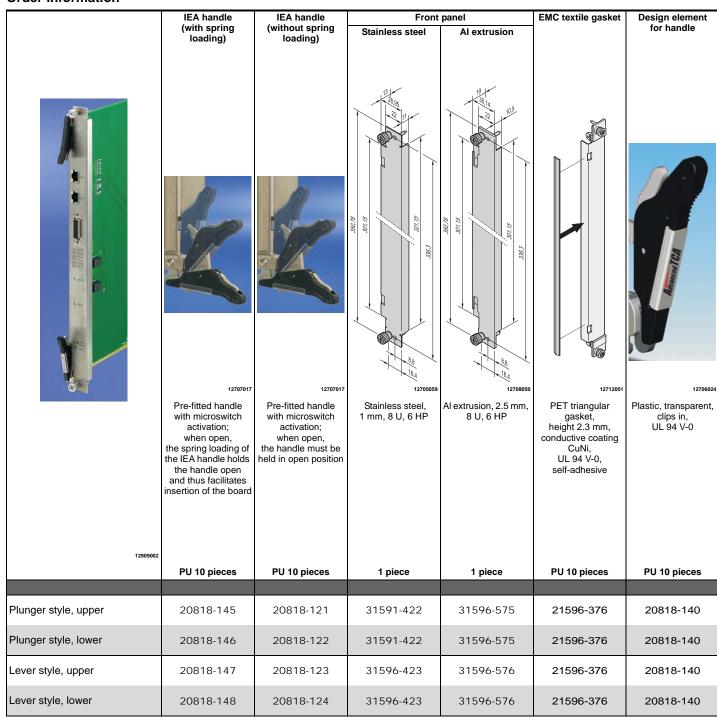
Handle with lever contact (lever style)



12707017

Front panels and IEA handle (with/without spring loading)

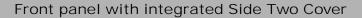
Order Information

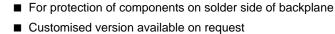


Note

■ Intuitive Ergonomic Aesthetic = IEA handle



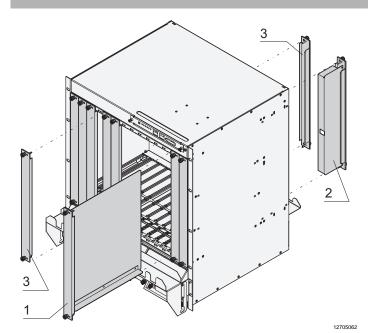


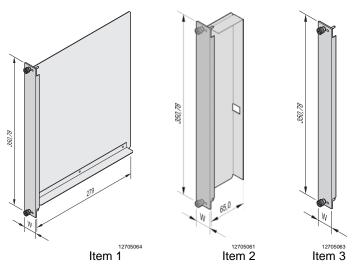


Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, www.frontpanelexpress.eu









AdvancedTCA air deflectors, filler panels

- Front panels, stainless steel or Al extrusion
- 6 HP front panels in three versions
- Front: Front panel with air baffle
- (item 1, air baffle blocks the air from unused slots)
- Rear: Front panel with air baffle
- (item 2, air baffle blocks the air from unused slots)
- Only front panel (item 3)

Delivery comprises (Kit)

Item	Qty	Description
1	1	Front panel
2	1	Air baffle (front or rear)

Order Information

AdvancedTCA air deflector

Item	Height U	Width HP	Depth mm	W mm	Description	Part no.
1	8	6	280	30.14	Front panel, Al extrusion, incl. air baffle, with mesh gasket	21596-008
1	8	6	280	28.95	Front panel, stainless steel, incl. air baffle with mesh gasket	21591-079
2	8	6	70	30.14	Front panel, Al extrusion, for rear I/O area, incl. air baffle, with mesh gasket	21591-107
2	8	6	70	28.95	Front panel, stainless steel, for rear I/O area, incl. air baffle with mesh gasket	21591-099

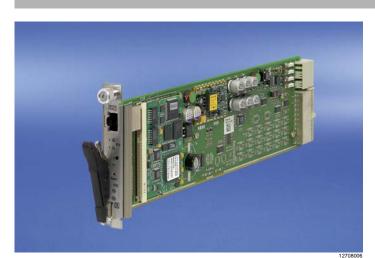
AdvancedTCA filler panel

Item	Height U	Width HP	Depth mm	W mm	Description	Part no.
3	8	6	-	30.14	Al extrusion, front panel with mesh gasket	21591-104
3	8	6	_	28.95	Front panel, stainless steel, with mesh gasket	21591-097

Note

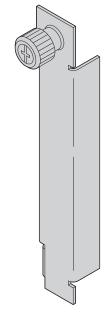
- Version with CuBe gasket available on request
- AdvancedMC carriers see page 8.26
- CAD data: please enter part number under www.schroff.biz/oneclick/







Cable



Front panel, stainless steel

Shelf managers (ACB-V)

- Based on Pigeon Point Shelf Management technology ShMM 500
- Up to two Shelf Managers per system can be used per system
- Includes stainless steel front panel and AdvancedTCA handle

Order Information

Height	Width	Depth	Description	Part no.	
U	mm	mm			
2	20.00	280	Shelf manager, bussed version	21596-300	
2	20.00	280	Shelf manager, radial version	21596-301	
Cable 1 piece	Cable RJ 45 Cat 5 plug - D-Sub plug, 9-pin, length 2 m, 1 piece 23204-187				
Front panel, stainless steel to cover an unused shelf manager slot, width 15.22 mm, height 99.33 mm, 21596-012 incl. EMC gasket, 1 piece					

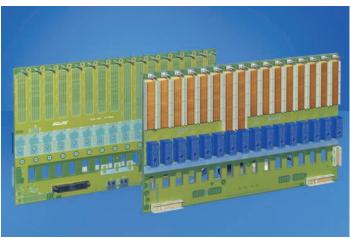
Note

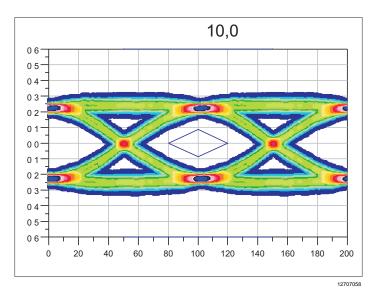
■ Shelf manager to Intel NetStructure[®] MPCMM0002 (chassis management module) available on request



For further information www.schroff.biz/oneclick oneClick search code = Part no.

12706052





Backplane

All Schroff AdvancedTCA systems are equipped with a highperformance Schroff backplane. Thanks to our years of experience in high-speed data transfer we have now built 40G backplanes to the XAUI specification into our systems, which are constructed with the low-cost FR 4 material. Additionally, the number of layers has been reduced to less than half of the first backplanes. The Schroff AdvancedTCA systems are equipped and available

with:

- Backplane with dual star, full mesh and replicated mesh topology; dual dual star topology on request
- Bussed or radial intelligent platform management interface (IPMB)
- Redundant power supply, divided into up to four independent segments
- Point-to-point connection structure independent of protocol
- Data transfer rates of up to 40 Gbps
- I²C bus for internal monitoring
- Outstanding eye pattern of up to 10 Gbps per differential pair (40G backplane)

Field replaceable units (FRUs)

Field replaceable unit (FRU) designates system components that can be replaced on site. This reduces system downtime to a minimum. Schroff offers various FRU components for AdvancedTCA systems:

- Power entry modules, see from page 8.20
- Fan trays, see from page 8.21
- Air filters see page 8.23
- Shelf alarm panels, see from page 8.23
- Shelf alarm display, see page 8.24
- Chassis data module, see page 8.25

Power entry module for 5 U, 6 slot AdvancedTCA system



- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- \blacksquare For 2 pairs of lines each (RTN and -48 $V_{DC}\!/\!\text{-}60~V_{DC}\!)$ per input
- Delivers up to 350 W/slot
- Hot-swap push-button and LED display (hot-swap, alarms, etc.)
- 2 circuit breakers and 2 double lugs (power terminals)

Order Information

Description	Qty/PU	Part no.
Power entry module 6-slot system (11596-160, 11596-161)	1	21990-058

Note

- CAD data: please enter part number under <u>www.schroff.biz/oneclick/</u>
- AdvancedTCA systems see from page 8.6

Power entry module for 12 U, 14 slot AdvancedTCA system



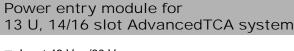
- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- \blacksquare For 4 pairs of lines each (RTN and -48 $V_{DC}\!/\!\text{-}60~V_{DC})$ per input
- 8 fuses 30 A/80 V each

Order Information

Description	Qty/PU	Part no.
Power entry module for 12 U, 14 slot AdvancedTCA system (11596-300, -303)	1	21596-003
Fuse 30 A/80 V for power entry module, Pl	J 10 pieces	21191-207

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.9



- Input 48 $V_{DC}/60 V_{DC}$
- Plugged-in at rear of chassis
- For 4 pairs of lines each (RTN and -48 V_{DC}/-60 V_{DC}) per input
- 8 fuses 30 A/80 V each

Order Information

Description	Qty/PU	Part no.
Power entry module for 13 U,		
14/16 slot AdvancedTCA system	1	21596-020
(11990-600, -601, -603; 11592-500, -503)		
Fuse 30 A/80 V for power entry module, P	U 10 pieces	21191-207

Note

12706006

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.9



Power entry module for 14 U, 14-slot AdvancedTCA system

- Input 48 V_{DC}/60 V_{DC}
- Plugged-in at rear of chassis
- For 2 pairs of lines each (RTN and -48 V_{DC}/60 V_{DC}) per input
- 8 fuses 50 A/80 V each



Order Information

Description	Qty/PU	Part no.
Power entry module for 14 U,	-	
14-slot AdvancedTCA system	1	21990-224
(11990-10x)		
Accessories		
Fuse50 A/80 V for power entry module	e, PU 10 pieces	21990-225



Fan tray for 5 U, 6 slot AdvancedTCA system

- Fan tray with 6 axial fans to cool front and rear boards in system
- Cooling capacity up to 350 W per board
- Extractor handle, hot-swap push-button and LED display (hot-swap, alarms, etc.)

Order Information

Description	Qty/PU	Part no.
Fan tray for 5 U, 6-slot system (11596-160, 11596-161)	1	21990-057

Note

- CAD data: please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.6



Main Catalogue E 09/2013

Fan tray for 12 U, 14 slot AdvancedTCA system

- Fan tray with 2 fans (330 m³/h = 195 cfm each) to cool front and rear boards in system
- Extractor handle and LED display (hot-swap, alarms, etc.)

Order Information

Description	Qty/PU	Part no.
Fan tray 12 U, 14 slot system (11596-3xx)	1	21596-236

Note

- CAD data: please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.7



Fan tray for 13 U, 14 slot AdvancedTCA system

- Fan tray with 3 radial fans $(300 \text{ m}^3/\text{h} = 175 \text{ cfm})$ to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)



Order Information

Description	Qty/PU	Part no.
Fan tray 14-slot systems (11990-60x)	1	21990-184

- AdvancedTCA systems see page 8.8
- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/



12706009

Upper fan tray for 14 U, 14-slot AdvancedTCA system

- Fan tray with 6 axial fans (570 m³/h = 336 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front



Order Information

Description	Qty/PU	Part no.
Upper fan tray for 14 U, 14-slot systems (11990-10x)	1	21990-227



Lower fan tray for 14 U, 14-slot (11990-10x)

- Fan tray with 6 axial fans (570 $\text{m}^3/\text{h} = 336 \text{ cfm}$) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front



Order Information

Description	Qty/PU	Part no.
Lower fan tray for 14 U, 14-slot systems (11990-10x)	1	21990-228



12712002

Air filters for AdvancedTCA systems

- 45 PPE, 80 % dust collection to NEBS GR-78 Core standard
- Material Polyurethan UL 94 HF1

Order Information

Air filter	Qty/PU	Part no.
for 2 U, 2 slot systems (11596-088, 11596-090, 11596-107)	1	21596-515
for 5 U, 6 slot systems (11596-16x)	1	21990-059
for 13 U, 16 slot systems (11592-50x)	1	21594-144
for 14 U, 14 slot system (11990-10x)	1	21990-229

Note

- CAD data: please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.9

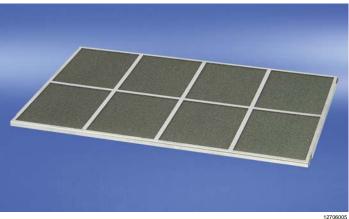


Photo shows air filter of 14 slot system

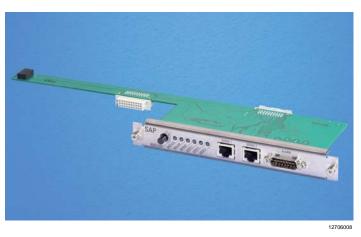
Shelf alarm panel for 12 U, 14 slot AdvancedTCA system

- Displays all alarm signals in accordance with AdvancedTCA specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)
- D-Sub plug for Telco alarm



Description	Qty/PU	Part no.
Shelf alarm panel for 12 U, 14 slot systems (11592-40x, 11596-30x)	1	21596-022

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.7



Upper fan tray for 14 U, 14-slot (11990-10x)

- Fan tray with 6 axial fans (570 m³/h = 336 cfm) to cool front and rear boards in the system
- Extractor handle and LED display (hot-swap, alarms, etc.)
- Telco alarm interface on front



Order Information

Description	Qty/PU	Part no.
Lower fan tray for 14 U, 14-slot systems (11990-10x)	1	21990-228



Air filters for AdvancedTCA systems

- 45 PPE, 80 % dust collection to NEBS GR-78 Core standard
- Material Polyurethan UL 94 HF1

Order Information

Air filter	Qty/PU	Part no.
for 2 U, 2 slot systems (11596-088, 11596-090, 11596-107)	1	21596-515
for 5 U, 6 slot systems (11596-16x)	1	21990-059
for 13 U, 16 slot systems (11592-50x)	1	21594-144
for 14 U, 14 slot system (11990-10x)	1	21990-229

Note

- CAD data: please enter part number under <u>www.schroff.biz/oneclick/</u>
- AdvancedTCA systems see from page 8.9

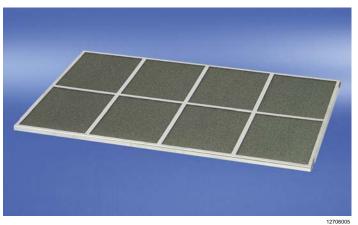


Photo shows air filter of 14 slot system

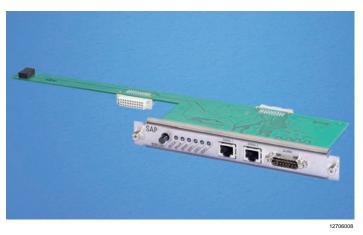
Shelf alarm panel for 12 U, 14 slot AdvancedTCA system

- Displays all alarm signals in accordance with AdvancedTCA specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)
- D-Sub plug for Telco alarm



Description	Qty/PU	Part no.
Shelf alarm panel for 12 U, 14 slot systems (11592-40x, 11596-30x)	1	21596-022

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.7



Shelf alarm panel for 13 U, 14 slot AdvancedTCA system

- For output of all Telco alarm signals in accordance with AdvancedTCA Specification
- D-Sub socket for Telco alarm



Description	Qty/PU	Part no.
Shelf alarm panel for 13 U, 14 slot systems (11596-10x)	1	21596-140

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.8



Shelf alarm panel for 13 U, 16 slot AdvancedTCA system

- For output of all Telco alarm signals in accordance with AdvancedTCA specification
- D-Sub socket for Telco alarm

Order Information

Description	Qty/PU	Part no.
Shelf alarm panel for 13 U, 16 slot systems (11592-50x)	1	21596-025

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.9



12706010

Shelf alarm display for 13 U, 14 and 16 slot AdvancedTCA system



- Display the Telco and fan tray alarm signals in accordance with AdvancedTCA Specification
- With alarm cut-off push button
- Two RJ 45 sockets to connect one serial console (serial interface of the two shelf managers)

Order Information

Description	Qty/PU	Part no.
Shelf alarm display		
for 13 U, 14 and 16 slot systems	1	21596-026
(11592-5xx, 11596-1xx)		

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see page 8.9

Chassis data module for 12, 13 and 14 U AdvancedTCA systems

- SEEPROM for chassis FRU data (user must specifically programm it for the chassis)
- Temperature sensors for input temperature of chassis
- Hall sensor for filter mat ("air filter present")

Order Information

Chassis data module	Qty/PU	Part no.
for systems 11592-50x, 11596-30x, 11596-60x	1	21596-023
for systems 11990-10x	1	21990-226

Note

- Download of FRU files: Please enter part number under www.schroff.biz/oneclick/
- AdvancedTCA systems see from page 8.9



Illustration shows chassis data module 21596-023

E 10/2012

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units ... 7

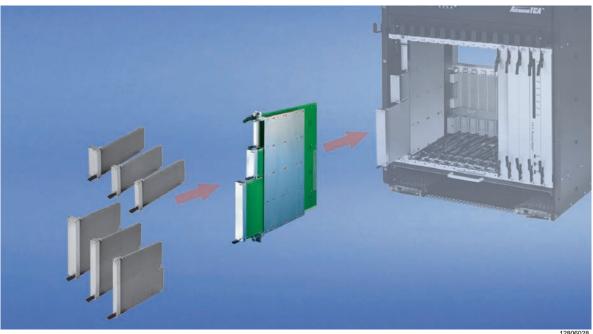
Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component system 11

Systems - AdvancedMC carriers

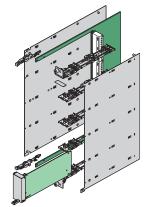


AdvancedMC carriers

AdvancedMC carriers are plug-in units that are slotted into an AdvancedTCA system. They contain the carrier board that accepts AdvancedMC modules.

Electrical connection to the AdvancedTCA backplane is via connectors. With the fullyassembled AdvancedMC carrier in place, cost-effective additional functions may be integrated into the system.

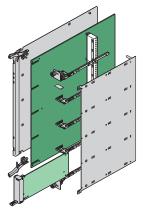
The standard, in accordance with PICMG specification AMC.0 R2.0, defines three different mechanical versions:



12805082

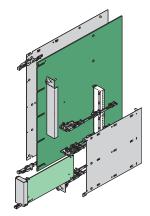
Cutaway carrier

- Carrier board is cut out in the area of the AdvancedMC modules
- Max. placement: 8 single compact or 4 single full-size AdvancedMC modules
- Combinations of full-size and compact modules are possible



Conventional carrier

- Carrier board runs continuously from front to rear
- Max. placement: 4 single compact or 4 single mid-size AdvancedMC modules



12805081

Hybrid carrier

12805083

- Carrier board is a combination of conventional and cutaway carrier
- The maximum placement depends on the carrier board design
- Combinations of all AdvancedMC modules are possible

Appendix 12



Downloads and further important information can be found on the Internet under www.schroff.biz

Systems - AdvancedMC carriers

AdvancedMC carriers for AdvancedTCA systems

- Cutaway, conventional and hybrid carrier mechanics for
 - compact AdvancedMC carrier boards
 - Mid-size AdvancedMC carrier boards
 - Full-size AdvancedMC carrier boards
- Standard versions from stock
- Individual carrier/module combination of your choice



AdvancedMC carriers

- 1 slot chassis, 8 U, 6 HP for AdvancedTCA systems
- Inserter/extractor handle for microswitch activation
- Versions
 - Cutaway carrier for compact and full-size modules
 - Conventional carrier for mid-size and compact modules

Individual solutions on request

- AdvancedMC hybrid carrier
- AdvancedMC hybrid mechanics for rugged AdvancedMC modules (MicroTCA.1)



12812005 12806016

Complete kits . . . 8.28 Kit without struts, guide rails 8.29 **Guide rails/struts**

Cutaway carriers For compact and full-

size modules

Overview 8.26

. Microswitches .. 8.31

Differences between standard and MF handles for AMC carriers 8.31

Conventional carriers

For mid-size and compact modules Complete kits ... 8.32 With Southco AdvancedTCA handle 8.32 With AdvancedTCA IEA handle 8.33 Guide rails/struts Microswitches . . 8.34

ServicePLUS from page 8.35

- e.g. individual configuration and fitting of hybrid carriers)
- e.g. modifications (cut-outs, special colours)
- e.g. custom solutions (special sizes)

www.schroff.biz/ServicePLUS



ServicePLUS . . 8.35

ServicePLUS configuration Hybrid carrier . . 8.35

Main Catalogue E 10/2012



14 4 13 8 6 9 10 13 2 11 13 7 5 3



Main Catalogue

E 10/2012

Carrier mechanics for compact and full-size AdvancedMC modules

- Mechanics for cutaway carrier board (carrier with 3 different struts, guide rails, ESD clips)
- Stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- Inserter/extractor handle, designed for microswitch activation hot-swap)

Delivery comprises (Kit)

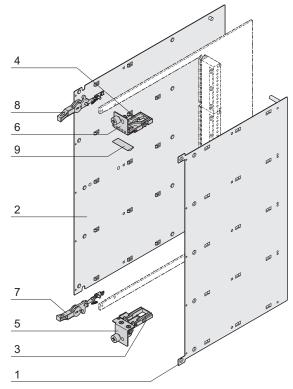
Item	Qty	Description
1	1	Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
2	1	Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
3	1	Lower splitting extrusion (strut), Zn die-cast, nickel-plated
4	1	Upper splitting extrusion (strut), Zn die-cast, nickel-plated
5	1	Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
6	1	Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in, with holes for LEDs
7	1	Standard inserter/extractor handle, with microswitch operation, plastic lever, black
8	1	Standard inserter/extractor handle, plastic lever, black
9	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
10	3	Support member between cover A and B
11	3	Support member for cover A (on the left)
12	3	Support member for cover B (on the right)
13	8	ESD clip
14	10	AdvancedMC guide rail, PBT, UL 94 V-0, red
15	1	Assembly kit

Order Information

Description	Part no.
Carrier mechanics for AdvancedMC compact and full-size modules with struts, ESD clips and guide rails	10849-001
Accessories	
Microswitch, normally closed, for AdvancedMC carrier (compact and full-size modules)	20849-236
for soldering (SMD), PU 10 pieces Microswitch, normally open, for AdvancedMC	
carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces	20849-235
Description inserter/extractor handle	Page 8.31
Microswitch description	Page 8.31
AdvancedMC module mechanics	Page 8.56









Carrier mechanics for compact and full-size AdvancedMC modules

- Mechanics for cutaway carrier board (carrier without struts, guide rails, ESD clips, for individual placement)
- Stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- Inserter/extractor handle, designed for microswitch activation (hot-swap)

Delivery comprises (Kit)

Item	Qty	Description
1	1	Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
2	1	Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
3	1	Lower splitting extrusion (strut), Zn die-cast, nickel-plated
4	1	Upper splitting extrusion (strut), Zn die-cast, nickel-plated
5	1	Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
6	1	Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in, with holes for LEDs
7	1	Standard inserter/extractor handle, with microswitch operation, plastic lever, black
8	1	Standard inserter/extractor handle, plastic lever, black
9	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
10	1	Assembly kit

Order Information

Description	Part no.
Carrier mechanics for AdvancedMC compact and full-size modules without struts, ESD clips and guide rails	10849-002
Accessories	
Microswitch, normally closed, for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces	20849-236
Microswitch, normally open, for AdvancedMC carrier (compact and full-size modules) for soldering (SMD), PU 10 pieces	20849-235
Further struts, ESD clips and guide rails	Page 8.30
Description inserter/extractor handle	Page 8.31
Microswitch description	Page 8.31
AdvancedMC module mechanics	Page 8.56



15 3 5 25 4

Board guides/struts for AdvancedMC compact and full-size modules

- Struts and guide rails are always required to guide boards
- 3 different struts
 - The strut is assembled between the cover plates A and B

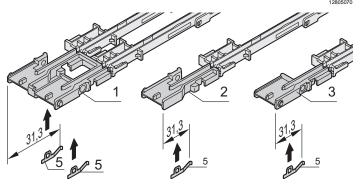
 - The strut is assembled on the right of cover plate B.
 The strut is assembled on the right of cover plate B.
- The ESD clip pushes into the strut (one per board guide)
- The guide rails clip into the cover plate

Order Information

Item	Description	Qty/PU	Part no.
1	Strut between cover A (left) and B (right), Zn die-cast, nickel-plated	10	20849-009
2	Splitting extrusion (strut) for cover A (left), Zn die-cast, nickel-plated	10	20849-010
3	Splitting extrusion (strut) for cover B (on the right), Zn die-cast, nickel-plated	10	20849-011
4	AdvancedMC guide rail, PBT, UL 94 V-0, red	10	20849-008
5	ESD clip, stainless spring steel, for deflection of electrostatic charges 50		20849-021
Acces			
Micro			

Accessories		
Microswitch, normally closed, for AdvancedMC carrier		
(compact and full-size modules)	20849-236	
for soldering (SMD), PU 10 pieces, page 8.31		
Microswitch, normally open, for AdvancedMC		
carrier (compact and full-size modules)	20849-235	
for soldering (SMD), PU 10 pieces - page 8.31		







Microswitch for carrier (compact and full-size AdvancedMC modules)

■ Microswitch for soldering (SMD)

Order Information

Description	Qty/PU	Part no.
Microswitch, normally closed , for AdvancedMC carrier (compact and full-size modules)	10	20849-236
Microswitch, normally open , for AdvancedMC carrier (compact and full-size modules)	10	20849-235

"Normally closed"

12807081

Technical data

Max. switch current	1 mA, 5 V _{DC}
Operating temperature	-15 °C +70 °C
Electrical lifespan	10 ⁵ switching cycles

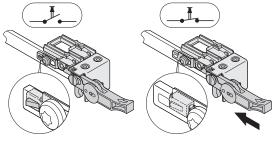


For further information www.schroff.biz/oneclick oneClick search code = Part no.

Handle in inoperative position

Handle activated

Closer

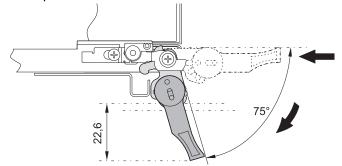


Handle in inoperative position

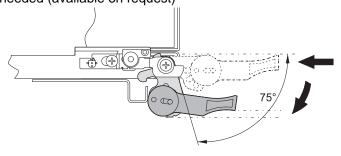
Handle activated

Differences between standard and MF handle for AdvancedMC carrier (compact and full-size modules)

Standard front handle - is included in delivery of carriers for compact and full-size modules



MF handle - can be exchanged by standard handle if needed (available on request)



12806063 ■ Extractor handle 75° opening angle

■ Insertion/extraction in three steps (2 operations)

■ Small swing range (0 mm) below and above the pitch line. The lower respectively upper limit of the carrier is not exceeded during extraction.

- Extractor handle 75° opening angle
- Insertion/extraction in one step
- Swing range: 23 mm below and above the pitch line
- Included in delivery of carrier

12805072

Systems - AdvancedMC conventional carrier

Carrier mechanism for mid-size AdvancedMC modules with AdvancedTCA Southco handle, complete kit

- Mechanics for conventional carrier, stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- AdvancedTCA Southco inserter/extractor handle, designed for microswitch activation (hot-swap)
- Carrier mechanics with struts and guide rails for four modules

Delivery comprises (Kit)

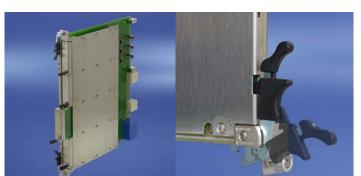
		•
Item	Qty	Description
1	1	Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
2	1	Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
3	1	Lower splitting extrusion (strut), Zn die-cast, nickel-plated
4	1	Upper splitting extrusion (strut), Zn die-cast, nickel-plated
5	1	Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
6	1	Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
7	1	Lower AdvancedTCA Southco inserter/extractor handle, with microswitch activation, lever plastic, black
8	1	Upper AdvancedTCA Southco inserter/extractor handle, with microswitch activation, lever plastic, black
9	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
10	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
11	3	Splitting extrusion between covers A and B (4 ESD clips)
12	5	AdvancedMC guide rail, PBT, UL 94 V-0, green
13	1	Fixing material kit

Order Information

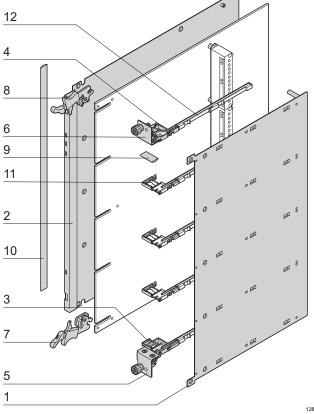
Description	Part no.
AdvancedMC carrier mechanism for mid-size AdvancedMC modules with Southco AdvancedTCA IEA handle with struts, ESD clips and guide rails	10849-009
Accessories	
Microswitch for carriers (mid-size AdvancedMC modules) normally closed, for soldering (SMD), PU 10 pieces - Page 8.34	20817-853
Microswitch for carriers (mid-size AdvancedMC modules) normally open, for soldering (SMD), PU 10 pieces - Page 8.34	20817-909
AdvancedMC module mechanics	Page 8.56

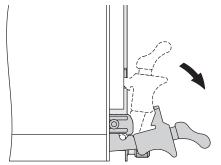
Note

- Carrier with stronger cover plate A (1 mm) on request
- Carrier for compact AdvancedMC modules on request
- Southco type handle kit on request



12808003 128080





ServicePLUS see page 8.35

Main Catalogue

E 10/2012



Systems - AdvancedMC conventional carrier

Carrier mechanism for mid-size AdvancedMC modules with AdvancedTCA IEA handle, complete kit

- Mechanics for conventional carrier, stainless steel (EMC shielded)
- Width 1 slot (6 HP), height 8 U, corresponds to PICMG[®] AMC.0 R2.0
- AdvancedTCA IEA inserter/extractor handle, designed for microswitch activation (hot-swap)
- Carrier mechanics with struts and guide rails for four modules

Delivery comprises (Kit)

Item	Qty	Description
1	1	Cover plate B (right), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
2	1	Cover plate A (left), stainless steel, brushed, 0.6 mm, inner surface electrically insulated, exterior with protective film
3	1	Lower splitting extrusion (strut), Zn die-cast, nickel-plated
4	1	Upper splitting extrusion (strut), Zn die-cast, nickel-plated
5	1	Lower front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
6	1	Upper front panel, stainless steel, brushed, 1 mm, alignment pin and retention screws pressed in
7	1	Lower AdvancedTCA IEA inserter/extractor handle, with microswitch activation, plastic lever, black
8	1	AdvancedTCA IEA inserter/extractor handle, top, with microswitch activation, lever plastic, black
9	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
10	1	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
11	3	Splitting extrusion between covers A and B (4 ESD clips)
12	5	AdvancedMC guide rail, PBT, UL 94 V-0, green
13	1	Fixing material kit

Order Information

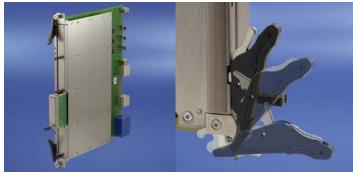
Description	Part no.
AdvancedMC carrier mechanism for mid-size AdvancedMC modules with AdvancedTCA IEA handle with struts, ESD clips and guide rails	10849-011
Accessories	
Microswitch for carriers (mid-size AdvancedMC modules) normally closed, for soldering (SMD), PU 10 pieces	20817-853
Microswitch for carriers (mid-size AdvancedMC modules) normally open, for soldering (SMD), PU 10 pieces	20817-909
AdvancedMC module mechanics	Page 8.56

Note

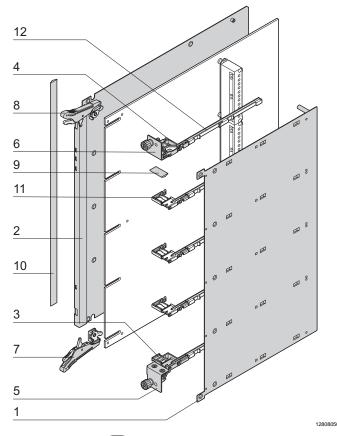
- Carrier with stronger cover plate A (1 mm) on request
- Carrier for compact AdvancedMC modules on request
- Southco type handle kit on request

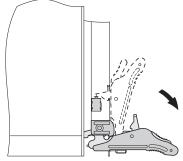


For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



2808001 1280

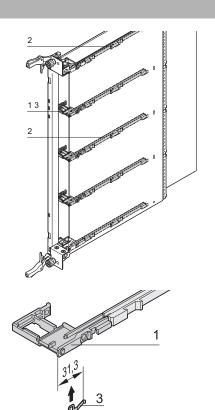






ServicePLUS see page 8.35

Systems - AdvancedMC conventional carrier



Board guides/struts for AdvancedMC mid-size modules

- Struts and guide rails are always required to guide boards
- Strut is assembled between cover plates A and B
- The ESD clip pushes into the strut (one per board guide)
- The guide rails clip into the cover plate

Order Information

Item	Description	Qty/PU	Part no.
1	Strut between cover A (left) and B (right), Zn die-cast, nickel-plated	10	20849-242
2	AdvancedMC guide rail for mid-size carrier, PBT, UL 94 V-0, green	10	20849-166
3	ESD clip, stainless spring steel, for deflection of electrostatic charges	50	20849-021



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

12806062

Microswitch for carriers (mid-size AdvancedMC modules)

- Microswitch for soldering (SMD)
- Can be used for all conventional carrier handles

Order Information

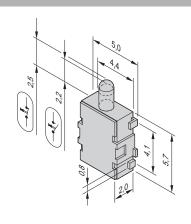
Description	Qty/PU	Part no.
Microswitch (normally closed) for carrier (mid-size AdvancedMC modules)	10	20817-853
Microswitch (normally open) for carrier (mid-size AdvancedMC modules)	10	20817-909

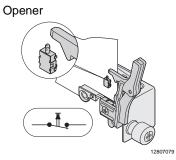
Technical data

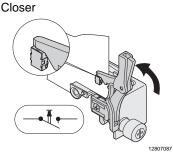
Max. switch current	100 mA, 12 V _{DC}
Operating temperature	-20 °C +60 °C
Electrical lifespan	5 x 10 ⁵ switching cycles



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.







Systems - AdvancedMC carrier ServicePLUS



modification

Small changes. Large impact.Mechanical modifications

Custom drillings, cut-outs and special colours for off-the-shelf products

■ Ready to send within 10 working days



solution

Simple. Fast. From one source.

Integration and custom developments

■ Customised complete solutions

ServicePLUS: solution



AdvancedMC carrier mechanics

- The carrier board is a combination of conventional and cutaway carriers
- Max. placement depends on the design of the carrier board
- Custom versions on request
- Single/double combinations
- Handles
 - AdvancedTCA IEA
 - AdvancedTCA Southco

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units ... 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component

Systems - MicroTCA



12907003

MicroTCA (Micro **Telecommunications Computing Architecture)**

MicroTCA.0 R1.0 is a modular standard that utilises AdvancedMC modules. These are plugged directly onto the backplane.

In addition to standard systems, modifications and customised solutions, Schroff also offers all components for building systems.

The central unit of a MicroTCA system is the MicroTCA carrier hub (MCH), which performs the carrier and often also shelf management. It also acts as the data switch in the system.

Carrier and shelf management include, among other things, temperature, voltage and air monitoring.

Remote monitoring can be set up via an external Ethernet connection. This allows early detection and remedying of temperature problems. Downtimes are thus reduced.

Applications

Reduced development costs and shorter time-to-market are the advantages of the MicroTCA standard compared to proprietary system solutions, as they can be found increasingly often in telecommunications today.

Among others the advantages over the previous bus systems (VME, CompactPCI busses) are the higher speed, smaller designs and larger flexibility.

MicroTCA is used in areas where faster data transfer rates are required and large data volumes must be processed in the shortest time, e.g. in telecommunications, automation, image processing, medical systems, defence systems

Heat dissipation

MicroTCA defines very high heat dissipation for the AdvancedMC modules.

The maximum heat dissipation for the largest module (double full-size) is determined as 80 W. Cooling is thus a challenge.

MicroTCA systems from Schroff can reliably dissipate this volume of thermal power loss. Special fans have been purpose-developed and create a particularly high static pressure.

In addition, thermal simulations and measurements are performed on Schroff MicroTCA systems to optimise the airflow.

system 11



Downloads and further important information can be found on the Internet under www.schroff.biz

Appendix 12

Main Catalogue E 10/2012

Overview 8.36

Modular MicroTCA high speed systems

- Very wide product range in terms of dimensions, number of slots, cooling principles, backplane topologies
- Modifications to your requests
- Systems for MicroTCA.0, MicroTCA.1 and MicroTCA.4





MicroTCA.4 systems for test and measurement applications

- Cube and 19" systems
- For double mid-size AMC modules
- With rear board cage for rear transition modules
- Cooling units with management controller



MicroTCA.1 systems for industrial applications

- Cube systems
- For double mid-size AdvancedMC modules
- For harsh environmental conditions
- Cooling units with management controller



MicroTCA.0 systems for communications applications

- Cube and 19" systems
- For single and double AdvancedMC modules
- Cooling units with management controller



MicroTCA.0 systems for laboratory applications

- Desk-top enclosures with tip-up feet
- Cube and 19" systems
- Cooling units without management controller

ServicePLUS from page 8.112

e.g. individual configuration and assembly e.g. modifications (backplanes, power supply)

e.g. ventilation concepts

e.g. custom solutions

service

www.schroff.biz/ServicePLUS

Cube, 5 U, 42 HP, for 7 double modules 8.38
9 U, for 12 double modules 8.39
MicroTCA.1 systems for industrial applications
Cube, 5 U, 42 HP, for 6 single modules 8.40
MicroTCA.0 systems for communications applications
Cube, 5 U, 30 HP, for 4 single

MicroTCA.4 systems

. . 8.42

for test and

modules . . .

modules ...

1 U, for 6 single

3 U, for 10 single

6 U, for 9 single modules 8.45

modules 8.43 4 U, for 12 single

modules 8.44

measurement applications

MicroTCA.0	
case systems laboratory	for
applications	

Cube 3 II 30 HP

for 4 single modules	8.4
3 U vertical, for	

3	U	ve	rti	ca	l, fc	r	
4	s	ing	le	mo	odu	les	8.47

Access	ories	
Splitting	kit	8.48

Guide rails	8.49
Power feeder nodules	8.50
ower supply	8.51

units (FRUs) . . . 8.53

Field replaceable

ServicePLUS..8.112

Main Catalogue E 10/2012

12912001

MicroTCA.4 system, cube, 5 U, 42 HP, for 7 double AdvancedMC modules

- In accordance with PICMG MTCA.4 R1.0 specification
- 5 U, 42 HP cube system for
 6 double mid-size and 1 double full-size AdvancedMC modules,
 1 double full-size MCH and 1 double full-size power module
- 6 rear transition module slots for double mid-size modules and one slot for double full-size
- Backplane with star topology, direct connections for S-ATA/SAS, clock and trigger lines as per PICMG MTCA.4
- Clock topology to PICMG AMC.0 R2.0
- Hot-swap fan module with cooling unit manager (CU EMMC), airflow from bottom to top, fan speed for front and rear sections can be separately adjusted via MCH
- Air filter, exchangeable from front



Part no.

Front view



Rear view

AMC Port | AMC Port | AMC |

Backplane topology

Delivery comprises

Item	Qty	Description
1	1	MicroTCA system, 5 U, 42 HP, 373 mm deep, zinc-plated
2	7	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with star topology for 7 AdvancedMC modules, 1 MCH and 1 power module
4	1	Hot-swap fan module with cooling unit manager (CU EMMC) and 6 fans
5	1	Air filter, exchangeable from front

Depth

Number

of slots

Width

ЦΒ

Order Information

..

Height

Height

mm	U	HP	mm	01 51015	
222.25	5	42	373	7	11850-021
Accessor	ies				
Power mo	odule Mi	croTCA, AC	/DC, double	full-size,	
with power	er mana	gement (PM	EMMC)		11098-438
550 W, 1 p	oiece - pa	age 8.52			
Splitting I	kit PU 5	pieces			20849-115
PFM, sing	gle full-s	ize 12 V _{DC} in	put, 40 A, w	ith PM EMMC,	
non-redun					21596-571
protection	, 1 piece				
PFM, single full-size 12 V _{DC} input, 80 A, with PM EMMC,					
non-redun	ıdant, wit	hout reverse	polarity and	overvoltage	21596-572
protection	, 1 piece				
Replacen	nent part	s (FRUs)			
Fan tray (2	21850-11	3)			Page 8.54
Air filter (2	1850-11	6)			Page 8.55
				•	

Note

■ Modified systems available on request



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

MicroTCA.4 system, 9 U, 84 HP, for 12 double mid-size AdvancedMC modules

- In accordance with PICMG MTCA.4 R1.0 specification
- 9 U, 84 HP cube system for
 12 double mid-size-AdvancedMC modules,
 2 double full-size MCHs and 4 double full-size power modules
- 12 rear transition module slots for double mid-size
- Backplane with dual star topology, direct connections for S-ATA/SAS, clock and trigger lines as per PICMG MTCA.4
- Clock topology to PICMG AMC.0 R2.0
- 2 hot-swap fan modules with cooling unit manager (CU EMMC) in push/pull configuration, airflow from front to rear, fan speeds for front and rear sections can be separately adjusted via the MCH

NEW

Part no.

Page 8.55

Page 8.55



Front view



Item	Qty	Description
1	1	MicroTCA system, 9 U, 84 HP, 373 mm deep, zinc-plated
2	12	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with dual star topology for 12 AdvancedMC modules, 2 MCHs and 4 power modules
4	2	Hot-swap fan module with cooling unit manager (CU EMMC) and 4 fans;
5	1	Air filter, exchangeable from front

Depth

mm

Number

of slots



Rear view

Order Information

Fan tray (21850-115) Air filter (21850-117)

Height

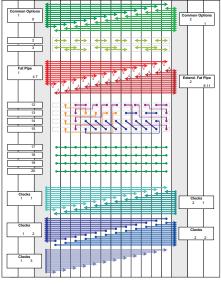
Width

HP

Height

mm

400.05	9	84	373	12	11890-035
Accesso	ries				
Power m	odule N	MicroTCA, AC	/DC, double	full-size,	
with pow	er man	agement (PM	EMMC)		11098-438
550 W, 1	piece -	page 8.52			
Splitting	kit PU	5 pieces			20849-115
	ndant, v	- size 12 V _{DC} ir vith reverse po ce			C, 21596-571
	ndant, v	- size 12 V _{DC} ir vithout reverse ce			•
Replacer	nent pa	rts (FRUs)			



Backplane topology

12611050





MicroTCA.1 systems, cube, 5 U, 42 HP, for 6 double AdvancedMC modules

- In accordance with PICMG MTCA.1 R1.0 specification
- 5 U, 42 HP cube system for 3 double mid-size, 3 double full-size AdvancedMC modules, 1 double full-size MCH and 1 double full-size PSU slot
- Backplane with star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Hot-swap fan module with cooling unit manager (CU EMMC), airflow from bottom to top
- Air filter, exchangeable from front
- Pluggable 300 W PSU with AC mains input in double full-size format, MicroTCA power management (PM EMMC) on backplane

NEW

12912005

Delivery comprises

Item	Qty	Description
1	1	MicroTCA cube, 5 U, 42 HP, 216.5 mm deep, zinc-plated
2	6	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with star topology for 6 AdvancedMC modules, 1 MCH and 1 PSU
4	1	Hot-swap fan module with cooling unit manager (CU EMMC) and 4 fans
5	1	Air filter, exchangeable from front
6	1	Pluggable PSU, 300 W, double full-size format

Order Information

Height	Height U	Width HP	Depth	Number of slots	Part no.
mm			mm		
222.35	5	42	373	6	11850-020
Accesso	ries				
		•	OC, double piece - page	•	11098-416
			DC, double piece - page	•	11098-392
Splitting	kit PU 5 pie	eces			20849-115
AdvancedMC front panels				Page 8.60	
Advance	dMC filler p	anels			Page 8.64
Equipme	nt cables				Page 3.38
Replacen	nent parts ((FRUs)			
Fan tray (21850-114)				Page 8.54
Air filter (2	21850-120)				Page 8.55

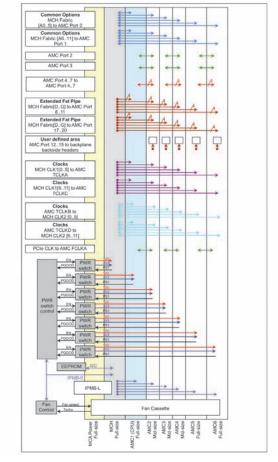
Note

12912051

■ Modified systems available on request



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



Backplane topology





■ In accordance with PICMG MTCA.0 R1.0 specification Cube systems for wall mounting

MicroTCA.0 system, cube, 3 U, 30 HP, for 4 single full-size AdvancedMC modules

- 4 single full-size AdvancedMC modules and 1 single full-size
- Backplane with star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Power supply via 250 W open-frame PSU, mains supply via IEC plug on rear, switching logic for individual slots on backplane

NEW

Delivery comprises

Item	Qty	Description
1	1	MicroTCA system, cube, 3 U, 30 HP, 250 mm deep
2	4	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with star topology for 4 AdvancedMC modules and 1 MCH
4	2	Fan for forced ventilation of slots
5	1	250 W open-frame PSU and IEC mains inlet with switch and fuse; power switching to slots via power management board
6	1	Power management board for 21850-046 and 21850-081

Order Information

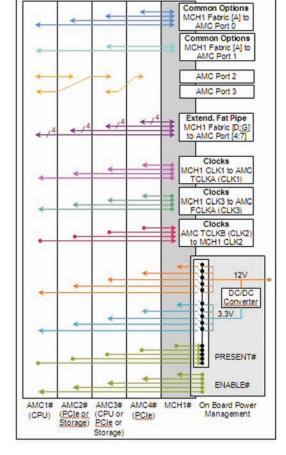
Height	Width	Depth	Number of slots	Part no.		
U	HP	mm				
3	30	250	4	21850-046		
Accessori	Accessories					
Advanced	MC front par	nels		Page 8.60		
AdvancedMC filler panels				Page 8.64		

Note

■ Modified systems available on request



For further information www.schroff.biz/oneclick oneClick search code = Part no.



Backplane topology



MicroTCA.0 system, 1 U, 84 HP, for 6 single mid-size AdvancedMC modules

- In accordance with PICMG MTCA.0 R1.0 specification
- 1 U, 19" subrack system for 6 single mid-size AdvancedMC modules, 1 single full-size MCH
- AC mains input (100 ... 240 V_{AC}) on rear of case, 250 W PSU built in, power management (PM EMMC) on backplane
- Backplane with star topology, direct connections for S-ATA / SAS
- Clock topology to PICMG AMC.0 R2.0, PCIe clock (MLVDS) generation on the backplane
- Hot-swap fan module with cooling unit manager (CU EMMC), airflow from right to left
- Air filter, swappable from front



Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	MicroTCA system, 1 U, 84 HP, 301 mm deep, powder-coated, black, RAL 9005
2	6	Pin position AdvancedMC module, with guide rail, for horizontal board mounting
3	1	Backplane with star topology for 6 AdvancedMC modules and 1 MCH
4	1	Hot-swap fan module with cooling unit manager (CU EMMC) and 5 fans;
5	1	Air filter, exchangeable from front
6	1	250 W open frame PSU and power management (PM EMMC) on backplane

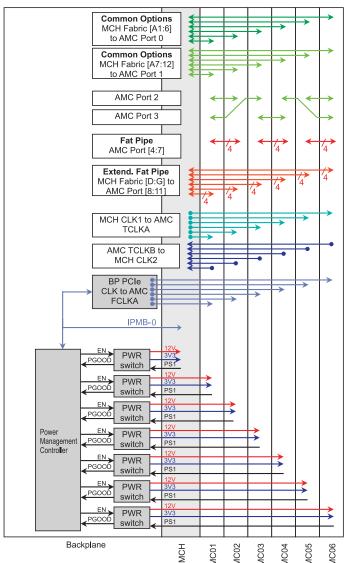
Order Information

Height	Height	Width	Depth	Number	Part no.
mm	U	HP	mm	of slots	
44.45	1	84	301	6	11850-017
Accesso	ries				
AdvancedMC front panels Page 8.60					
AdvancedMC filler panels					Page 8.64
Equipment cables					Page 3.38
Replacer	nent parts	(FRUs)			
Fan tray (21850-095)					Page 8.53
Air filter (2	21850-118)				Page 8.55



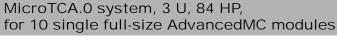
For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.





Backplane topology





- In accordance with PICMG MTCA.0 R1.0 specification
- 3 U, 19" subrack system for
 10 single full-size AdvancedMC modules,
 2 single full-size MCHs and 2 power modules with up to
 12 HP width
- Instead of 8 single full-size AdvancedMC modules, the right-hand board cage can be used for 4 double full-size modules
- Backplane with dual star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Two hot-swap fan modules in push/pull configuration, each with cooling unit manager (CU EMMC), airflow from right to left
- Air filter, exchangeable from front, with presence signal

Delivery comprises

Item	Qtv	Description
1	1	MicroTCA system, 3 U, 84 HP, 216 mm deep, powder-coated, black, RAL 9005
2	10	Pin position AdvancedMC module, with guide rail, for horizontal board mounting
3	1	Backplane with dual-star topology for 10 AdvancedMC modules, 2 MCHs and 2 power modules
4	2	Hot-swap fan unit with cooling unit manager (CU EMMC) and 1 fan;
5	1	Air filter, exchangeable from front
6	4	Splitting kit

Order Information

12907050

Height mm	Height U	Width HP	Depth mm	Number of slots	Part no.
133.35	3	84	216	10	11850-011
Accessories					

 $\begin{array}{lll} \textbf{PFM, single full-size} & 12~V_{DC} \text{ input, } 40~A, \text{ with PM EMMC,} \\ \text{non-redundant, with reverse polarity and overvoltage} & 21596-571 \\ \text{protection, } 1~\text{piece} \\ \textbf{PFM, single full-size} & 12~V_{DC} \text{ input, } 80~A, \text{ with PM EMMC,} \\ \end{array}$

non-redundant, without reverse polarity and overvoltage 21596-572 protection, 1 piece

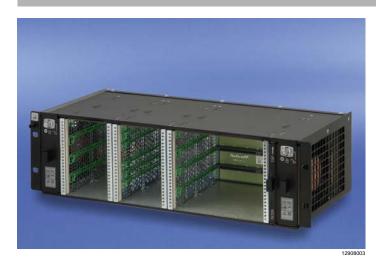
protection, i piece	
AdvancedMC front panels	Page 8.60
AdvancedMC filler panels	Page 8.64
Replacement parts (FRUs)	
Fan tray (21850-038)	Page 8.53
Air filter (21850-034)	Page 8.55

Note

- For description of the power supply module see page 8.50
- Replacement parts (FRUs) see from page 8.53
 - User manual: Please enter order number at www.schroff.biz/oneclick



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



	PM 2	MCH 2	AMC 6	AMC5	
2	I IVI Z	AMC 10	AMC 4	AMC 3	<u>Α</u> Ω
7	PM 1	MCH 1	AMC 2	AMC 1	J 2
	PIVI I	AMC 9	AMC 7	AMC 8	

Slot allocation

Common Options
MCHI Fabric (A) to
AMC Port 2

AMC Port 2

AMC Port 2

AMC Port 3

AMC Port 3

AMC Port 3

AMC Port 4

AMC Port 5

AMC Port 5

AMC Port 6

AMC Port 6

AMC Port 6

AMC Port 6

AMC Port 7

AMC Port 7

AMC Port 7

AMC Port 7

AMC Port 8

AMC Port

Backplane topology



MicroTCA.0 system, 4 U, 84 HP, for 12 single mid-size AdvancedMC modules



- 4 U, 19" subrack system for 12 single mid-size AdvancedMC modules, 2 single full-size MCHs and 2 power modules with up to 12 HP width
- Backplane with dual star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Two hot-swap fan modules on rear of case, each with cooling unit manager (CU EMMC), airflow from bottom front to rear
- Air filter, exchangeable from front, with presence signal



Delivery comprises

	o., c	
Item	Qty	Description
1	1	MicroTCA system, 4 U, 84 HP, 296 mm deep, powder-coated, black, RAL 9005
2	12	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with dual-star topology for 12 AdvancedMC modules, 2 MCHs and 2 power modules
4	2	Hot-swap fan module with cooling unit manager (CU EMMC) and 2 fans
5	1	Air filter, exchangeable from front
6	1	Cable channel

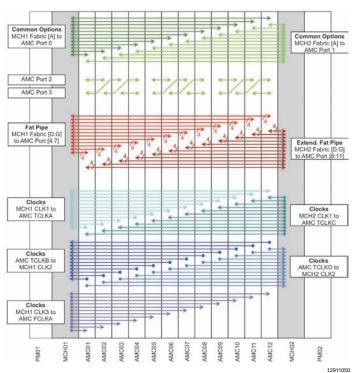
Order Information

Height	Height	Width HP	Depth	Number of slots	Part no.
mm			mm		11050 010
177.8	4	84	296	12	11850-018
Accessor	ies				
PFM, single full-size 12 V _{DC} input, 40 A, with PM EMMC, non-redundant, with reverse polarity and overvoltage protection, 1 piece					21596-571
PFM , single full-size 12 V _{DC} input, 80 A, with PM EMMC, non-redundant, without reverse polarity and overvoltage protection, 1 piece					21596-572
Advanced	dMC front p	anels			Page 8.60
AdvancedMC filler panels					Page 8.64
Replacement parts (FRUs)					
Fan tray (2	21850-112)				Page 8.53
Air filter (2	1850-119)				Page 8.55



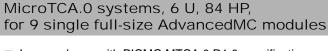
For further information www.schroff.biz/oneclick oneClick search code = Part no.





Backplane topology





- In accordance with PICMG MTCA.0 R1.0 specification
- 6 U, 19" subrack system for
 9 single full-size AdvancedMC modules,
 2 single full-size MCHs and
 2 power modules with up to 9 HP width
- Backplane with dual star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R1.0
- Two hot-swap fan modules in push/pull configuration, each with cooling unit manager (CU EMMC), airflow from bottom front to rear top
- Air filter, exchangeable from front, with presence signal

Delivery comprises

Item	Qty	Description
1	1	MicroTCA system, 6 U, 84 HP, 197 mm deep, powder-coated, black, RAL 9005
2	9	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with dual-star topology for 9 AdvancedMC modules, 2 MCHs and 2 power modules
4	2	Hot-swap fan unit with cooling unit manager (CU EMMC) and 2 fans; lower fan unit with interface and display for Telco alarms
5	1	Air filter, exchangeable from front
6	1	Cable channel

Order Information

Height	Height	wiath	Depth	Number	Part no.
mm	U	HP	mm	of slots	
266.7	6	84	197	9	10849-005
Accessori	ies				
PFM. sing	le full-size	12 Vnc inpu	ıt. 40 A. witl	h PM EMMC.	

protection, 1 piece **PFM, single full-size** 12 V_{DC} input, 80 A, with PM EMMC,
non-redundant, without reverse polarity and overvoltage 21596-572

non-redundant, with reverse polarity and overvoltage

protection, 1 piece	
AdvancedMC front panels	Page 8.60
AdvancedMC filler panels	Page 8.64
Replacement parts (FRUs)	
Replacement parts (FRUs) Fan tray (21850-036)	Page 8.54

Note

12806805

- For description of the power supply module see page 8.50
- Replacement parts (FRUs) see from page 8.53
- User manual: Please enter order number at <u>www.schroff.biz/oneclick</u>



For further information www.schroff.biz/oneclick oneClick search code = Part no.



Common Options
MCH1 Fabric [A] to
AMC Port 0

AMC Port 1

AMC Port 3

Fat Pipe
MCH1 Fabric [D, G)
to AMC Port (4.7)

Clocks
MCH2 CLK1 to
AMC CLK2 to
MCH2 CLK1 to
AMC CLK2 to
MCH2 CLK2 to

Backplane topology



ServicePLUS see page 8.112

21596-571

MicroTCA.0 case systems, cube, 3 U, 30 HP, for 4 single full-size AdvancedMC modules

- In accordance with PICMG MTCA.0 R1.0 specification
- Cube case system with tip-up feet for 4 single full-size AdvancedMC modules 1 single full-size MCH
- Backplane with star topology, direct connections for S-ATA/SAS
- Clock topology to PICMG AMC.0 R2.0
- Power supply via 250 W open-frame PSU, mains supply via IEC plug on rear, switching logic for individual slots on backplane



Delivery comprises

Item	Qty	Description
1	1	MicroTCA case system with tip-up feet, cube, (ratiopacPRO case)
2	4	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with star topology for 4 AdvancedMC modules and 1 MCH
4	3	Fan for forced ventilation of slots
5	1	250 W open-frame PSU and IEC mains inlet with switch and fuse
6	1	Power management board on 21850-081

Order Information

Description	Height U	Width HP	Depth mm	Number of slots	Part no.
Case system, power switching to slots via presence signal	3	30	316	4	21850-045
Case system, power switching to slots via power management board	3	30	316	4	21850-081
Accessories					
AdvancedMC front panels Page 8.6				Page 8.60	
AdvancedMC filler panels				Page 8.64	

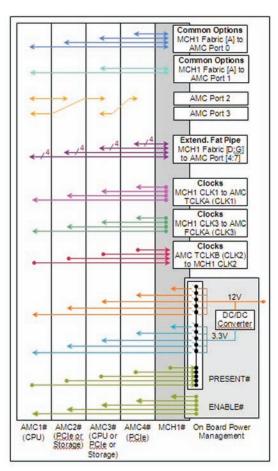
Note

■ Modified systems available on request



For further information www.schroff.biz/oneclick oneClick search code = Part no.





Backplane topology





MicroTCA.0 case system, 3 U, 84 HP, for 4 single AdvancedMC modules

- Evaluation system for AdvancedMC modules
- 19" desktop case system with tip-up feet for 4 single AdvancedMC modules (12 HP)
- Backplane with direct connections and headers on rear of backplane to connect external measuring equipment
- Case top cover and top board cage plate are easily removable (good access to the modules)
- Active heat dissipation, 2 fans (29 m³/h, 17 cfm) per slot
- Power supply via 400 W ATX PSU, mains supply via IEC plug on front

Delivery comprises

Item	Qty	Description
1	1	MicroTCA case system
2	4	Pin position AdvancedMC module, with guide rail, for vertical board mounting
3	1	Backplane with direct connections for 4 AdvancedMC-modules
4	8	Fan for forced ventilation of slots
5	1	400 W ATX PSU and IEC mains input with switch

Order Information

Height	Height	Width	Depth	Number	Part no.	
mm	U	HP	mm	of slots		
132.5	3	84	316	4	11850-013	
Acceptains						

AdvancedMC front panels	Page 8.60
AdvancedMC filler panels	Page 8.64

Note

User manual: Please enter order number at www.schroff.biz/oneclick



12908050

For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

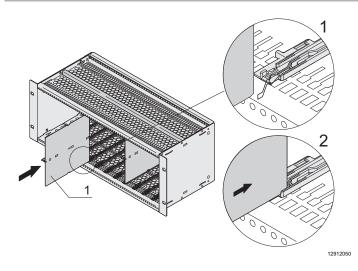
Backplane topology



Accessories and field replaceable units (FRUs)

Field replaceable unit (FRU) designates system components that can be replaced on site. This reduces system downtime to a minimum. Schroff offers various FRU components for AdvancedTCA systems:

- Splitting kit, see page 8.48
- MicroTCA guide rails, see page 8.49
- Power feed-through modules, see page 8.50
- PSUs (AC/DC, double full-size) with and without management, see from page 8.51
- Fan modules, see from page 8.53
- Air filters, see page 8.55



Splitting kit

- For fitting 2 single AdvancedMC modules one above the other in one double AdvancedMC slot
- Splitting kit is inserted into the appropriate receptacle of the Schroff MicroTCA guide rail and locks into the appropriate stud of the guide rail
- With the use of the splitting kit, no slots are lost

Delivery comprises

Item	Qty	Description
1	1	Stainless steel, chassis to accommodate a guide rail
2	1	Guide rail, AdvancedMC
3	1	Splitting extrusion, centre
4	1	ESD contact spring
5	1	Fixing material kit, user manual

Order Information

Description	Part no.
Splitting kit, PU 5 pieces	20849-115

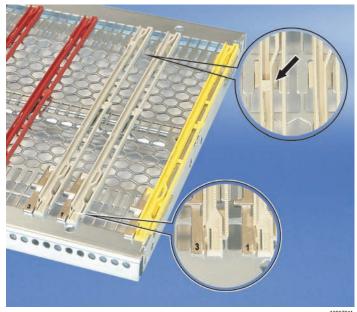


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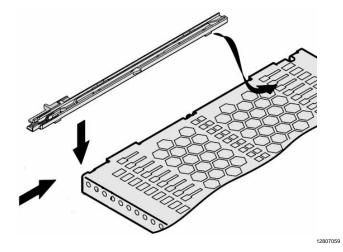
bottom (red)

top (green)



Guide rails bottom, grey, for guide rails of 6 HP wide (full-size)

MicroTCA carrier hubs



MicroTCA guide rails

■ Easy installation without tools in 1 HP grid; the minimum distance between two guide rails is 3 HP (compact)

Order Information

Description	Qty/PU	Part no.
Guide rail, top, green, with ESD clip; for all modules	10	20849-200
Guide rail, top, green, with ESD clip; for all modules	100	20849-201
Guide rail bottom, red; for AdvancedMC function modules	10	20849-194
Guide rail bottom, red; for AdvancedMC function modules	100	20849-195
Guide rail bottom, yellow; for power supplies	10	20849-196
Guide rail bottom, yellow; for power supplies	100	20849-197
Guide rail bottom, grey; for left-hand guide rail of a 6 HP wide MicroTCA carrier hub (designation 3)	10	20849-202
Guide rail bottom, grey; for right-hand guide rail of a 6 HP wide MicroTCA carrier hub (designation 1)	10	20849-198
Guide rail bottom, grey; for right-hand guide rail of a 6 HP wide MicroTCA carrier hub (designation 1)	100	20849-199

Note

CAD data: please enter part number under <u>www.schroff.biz/oneclick/</u>



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



Photo shows 21596-571

MicroTCA power feeder modules, single full-size

- Infeed of +12 V_{DC} supply voltage from an external source via D-Sub plug to 16 x 12 V_{DC} outputs to MicroTCA backplane
- Generation of +3.3 V_{DC} management voltage and distribution to 16 outputs
- Used in the power module slot (single full-size) instead of a MicroTCA power module, plug and form factor compatible
- 2 versions
 - With power management (PM EMMC), with protection against overvoltage and polarity reversal of input voltage, 5-pin D-Sub input plug
 - With power management (PM EMMC), no protection against overvoltage or polarity reversal of input voltage, 5-pin D-Sub input plug

Delivery comprises

Item	Qty	Description
1	1	Power feeder module, single full-size
2	1	Power management mezzanine board

Order Information

MicroTCA power feeder, single full-size	Part no.
With power management with overvoltage protection	21596-571
With power management without overvoltage protection	21596-572
Accessories	
Connection cable for power feeder module,	
5-pin D-Sub 5W5 (-48 V _{DC}) on M5 ring terminal,	23204-835
cable length 1.8 m, 1 piece	

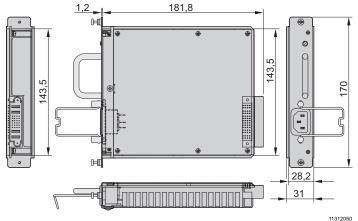


For further information www.schroff.biz/oneclick oneClick search code = Part no.

11309004



Photo shows 11098-392



AC/DC, double full-size, without management

- Wide input voltage range 90 ... 264 V_{AC}
- Active power factor correction
- Construction compatible with AdvancedMC double full-size
- Single-wire current share cable for redundancy operation
- 2 output voltages, 12 V and 3.3 V
- Corresponds to EMC class B as per EN 55022
- Without MicroTCA power management controller
- Mains input at front

NEW

Delivery comprises

Qty	Description
1	PSU for MicroTCA
	height double (148.3 mm)
	width full-size (6 HP)
	depth 186.65 mm
	connector Molex SSI
	front panel with handle and EMC gasket (fitted)

Order Information

Voltage	Current	Power	Description	Part no.
V	Α	W		
V ₁ : 12 V ₂ : 3.3	l ₁ : 25 l ₂ : 3	300	MCA 300 AC	11098-392
V ₁ : 12 V ₂ : 3.3	I ₁ : 45.8 I ₂ : 3	550	MCA 550 AC	11098-416

Note

- Output data for $T_A = -25 ... 55$ °C with forced cooling of 20 cfm
- Connector FCI 51720-10202402AA or Molex 87631-2019



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



AC/DC, double full-size, with power management (PM EMMC)

- Wide input voltage range 90 ... 264 V_{AC}
- Active power factor correction
- Construction compatible with AdvancedTCA double full-size
- MicroTCA power management in accordance with PICMG MTCA.0
- 16 output voltages 12 V and 16 x 3.3 V
- Corresponds to EMC class B as per EN 55022
- Mains input at front



Delivery comprises

Qty Description PSU for MicroTCA height double (148.3 mm) width full-size (6 HP) depth 186.65 mm connector MicroTCA Power front panel with handle and EMC gasket (fitted)

Order Information

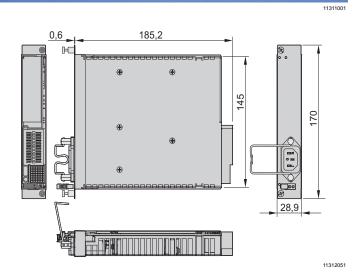
Voltage V	Current A	Power W	Description	Part no.
V ₁ : 12 V ₂ : 3.3	I ₁ : 45.8 I ₂ : 3	550	MTCA 550 AC	11098-438

Note

- Output data for T_A = -25 ... 55 °C with forced cooling of 20 cfm
- Connector to PICMG MTCA.0, MicroTCA power connector



For further information www.schroff.biz/oneclick oneClick search code = Part no.



Fan module for MicroTCA.0 system, 1 U

- Hot-swap fan tray with 4 regulated axial fans (40.2 m³/h each), free blowing, 1 unregulated axial fan (17 m³/h), 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)



Description	Qty/PU piece	Part no.
Fan module for 1 U MicroTCA system (11850-017)	1	21850-095



1291201

Fan module for MicroTCA.0 systems, 3 U, without Telco alarm panel

- Fan tray with 1 axial fan (225 m³/h), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

Description	Qty/PU	Part no.
Fan module for 3 U MicroTCA system (11850-003)	1	21850-038



Fan module for MicroTCA.0 system, 4 U

- Hot-swap fan tray with 2 regulated axial fans (234 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

Description	Qty/PU piece	Part no.
Fan module for 4 U MicroTCA systems (11850-018)	1	21850-112



Fan module for MicroTCA.4 cube system,



- Hot-swap fan tray with 6 regulated axial fans (109 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC); fan speeds for front and rear sections independently adjustable via MCH

Order Information

Description	Qty/PU piece	Part no.
Fan module for 5 U physics cube system (11850-021), 1 piece	1	21850-113

Fan module for 5 U MicroTCA.1 cube system,



- Hot-swap fan tray with 4 regulated axial fans (109 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

Description	Qty/PU piece	Part no.
Fan module for 5 U cube system (11850-020)	1	21850-114

Fan modules for MicroTCA.0 systems, 6 U, without Telco alarm panel



- Fan tray with 2 axial fans (460 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)

Order Information

Description	Qty/PU	Part no.
Fan module	1	04050 000
for 6 U MicroTCA system (10849-005)	'	21850-036

Fan module for MicroTCA.0 systems, 6 U, with Telco alarm panel

- Fan tray with 2 axial fans (460 m³/h each), free blowing, 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC)
- With Telco alarm interface, includes 3 LEDs, one telco alarm connector (DB15) and one telco alarm silencing push-button



Description	Qty/PU	Part no.
Fan module for 6 U MicroTCA system (10849-005)	1	21850-037



Fan module for MicroTCA.4, 19" systems, 9 U

- Hot-swap fan tray with 5 regulated axial fans (3 x 289 m³/h each, free blowing and 2 x 220 m³/h, free blowing), 12 V_{DC}
- With cooling unit enhanced module management controller (CU EMMC); fan speeds for front and rear sections independently adjustable via MCH

Order Information

Description	Qty/PU piece	Part no.
Fan module for 9 U, 19" physics system (11890-035)	1	21850-115



12912008

Air filters

- Material: polyurethane UL 94 HF1
- 45 ppi, 80 % dust reduction under NEBS GR-78 core standard

Order Information

Description	Qty/PU	Part no.
Air filter for 1 U MicroTCA.0 system (11850-017)	1	21850-118
Air filter for 3 U MicroTCA.0 system (11850-003)	1	21850-034
Air filter for 4 U MicroTCA.0 system (11850-018)	1	21850-119
Air filter for 5 U MicroTCA.1 cube system (11850-020)	1	21850-120
Air filter for 5 U MicroTCA.4 cube system (11850-021)	1	21850-116
Air filter for 6 U MicroTCA.0 systems (10849-005, 11850-005, 11850-007)	1	21850-033
Air filter for 9 U MicroTCA.4 19" system (11890-035)	1	21850-117



Photo shows air filter 21850-033

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units ... 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component system 11

Systems - AdvancedMC modules



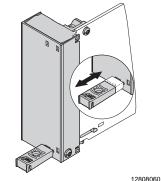
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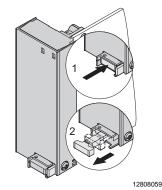


Stainless steel



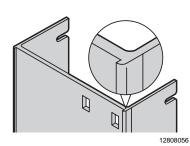
Pull-handle mechanism

- For compact, mid-size and full-size module widths
- Forward protrusion of handle 20 mm, width 8 mm



Push-pull handle mechanism

■ For mid-size and full-size module widths



Aluminium extrusion

■ Forward protrusion of handle 5 mm, width 14 mm





Downloads and further important information can be found on the Internet under www.schroff.biz

Overview 8.56

AdvancedMC module mechanics

■ Front panels with two locking mechanisms, usable for AdvancedMC carriers and MicroTCA systems

■ Front panels in steel or aluminium extrusion

- Dimensions
 - Single compact, mid-size, full-size
 - Double compact, mid-size, full-size
- Ruggedized AdvancedMC modules for MicroTCA.1 and MicroTCA.4 applications
- MicroTCA filler modules with adjustable airflow



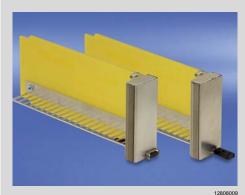






AdvancedMC module mechanics

- For PICMG[®] AMC.0 R2.0 (Fig. A), locking of modules without screws
- Ruggedized module mechanics for MicroTCA.1 and MicroTCA.4 (Fig. B) applications, with patented screw locking
- EMC shielded front panel in two materials (stainless steel; aluminium)
- Two different handle mechanisms (pull, push-pull)



AdvancedMC-MicroTCA filler modules

- Front panels with handle, PCB and air baffle for compact, mid-size and full-size AdvancedMC modules
- Air baffles to adjust air resistance of an unused slot
- Air passage adjustable (sliding plates)

PICMG AMC.0 R2.0RC1.2 Modules with push-pull-handle

AdvancedMC module

mechanics

mechanism.... 8.58
Modules with
pull-handle
mechanism 8.59

Front panels for module with pull-handle mechanism 8.60

Pull-handle mechanism 8.61

Modules with ruggedized pull-handle mechanism 8.62

Filler modules for MicroTCA

Pull-handle mechanism 8.63 Air baffle for filler module ECO 8.66

Microswitch . . . 8.67



30407004

ServicePLUS from page 8.67

e.g. individual configuration and assembly e.g. modifications (cut-outs, special colours, printing, front films) e.g. custom solutions (special sizes) www.schroff.biz/serviceplus/

ServicePLUS.. 8.67

Main Catalogue

Modules with push-pull-handle mechanism, PICMG® AMC.0 R2.0



- Push-pull-handle mechanism meets AdvancedMC standard; press handle (springs out) and pull to extract sub-assembly
- Push-pull-handle mechanism designed for microswitch activation (hot-swap); interlocking of modules without screws
- For conventional, cutaway and hybrid carriers
- Includes of light pipes
- Front panels in 2 materials:
 - Stainless steel
 - Aluminium extrusion; for foil printing

Delivery comprises (kit)

		•
Item	Qty	Description
1	1	U-shaped front panel, stainless steel or Al extrusion
2	1	Accepts light pipe and board bracket at top, Zn die-cast, nickel-plated
3a	1	Light pipe, top, PC, UL 94 V-0
3b	1	Light pipe, bottom, PC, UL 94 V-0
4	1	Push-pull-handle mechanism with microswitch activation and board bracket
5	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
6	1	Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
7	1	Assembly kit

Order Information

Module with push-handle mechanism,	Н	h	Part no.	Part no. Stainless
PICMG [®] AMC.0 R2.0	mm	mm	Aluminium	steel
Single mid-size, 4 HP	73.8	60.8	20849-288	20849-332
Single full-size, 6 HP	73.8	60.8	20849-290	20849-334
Double mid-size, 4 HP	148.8	135.8	20849-289	20849-333
Double full-size, 6 HP	148.8	135.8	20849-291	20849-335
Accessories				

Microswitch for AdvancedMC modules "normally open" for soldering (SMD), PU 10 pieces - page 8.67	20849-20
Filler Modules	Page 8.63

Note

- Pull-handle mechanism see page 8.61
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, www.frontpanelexpress.eu

FRONT PANEL EXPRESS



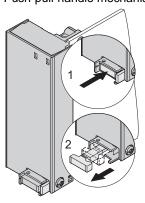
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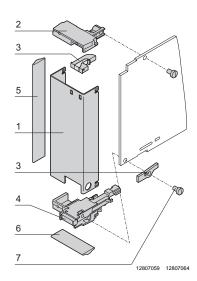
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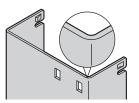


Photo shows modules with steel front panel (PCB not included)

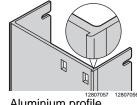
Push-pull-handle mechanism



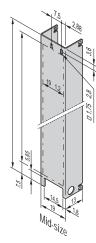


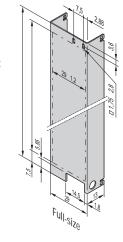


Stainless steel profile



Aluminium profile



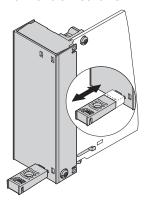


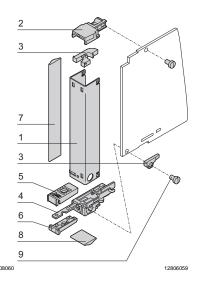
ServicePLUS see page 8.67

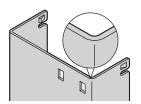


Photo shows modules with steel front panel (PCB not included)

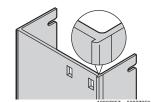
Pull-handle mechanism



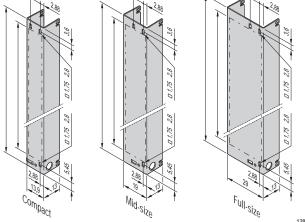








Aluminium extrusion



Modules with pull-handle mechanism, PICMG® AMC.0 R2.0

- Module in accordance with AdvancedMC standard
- For installation in MicroTCA chassis or AdvancedMC carriers (e.g. conventional, cutaway and hybrid carriers)
- Front panels in 2 versions:
 - Stainless steet
 - Aluminium extrusion; for foil printing

Delivery comprises (kit)

Item	Qty	Description
1	1	U-shaped front panel, stainless steel or Al extrusion
2	1	Accepts light pipe and board bracket at top, Zn die-cast, nickel-plated
3a	1	Light pipe, top, PC, UL 94 V-0
3b	1	Light pipe, bottom, PC, UL 94 V-0
4	1	Pull-handle mechanism with microswitch activation and board bracket
5+6	1	Pull-handle, PC, UL 94 V-0, black
7	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
8	1	Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
9	1	Assembly kit

Order Information

Module with pull-handle mechanism, PICMG [®] AMC.0 R2.0	H mm	h mm	Part no. Aluminium	Part no. Stainless steel
Single compact, 3 HP	73.8	60.8	20849-312	20849-127
Single mid-size, 4 HP	73.8	60.8	20849-268	20849-128
Single full-size, 6 HP	73.8	60.8	20849-270	20849-129
Double compact, 3 HP	148.8	135.8	20849-313	20849-130
Double mid-size, 4 HP	148.8	135.8	20849-269	20849-131
Double full-size, 6 HP	148.8	135.8	20849-271	20849-132

Accessories

Microswitch for AdvancedMC modules "normally open" for soldering (SMD), PU 10 pieces - page 8.67	20849-209
Filler Modules	Seite 8.63
Air baffle modules	Seite 8.63

Note

- Mechanism with pull-handle mechanism see page 8.61
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, <u>www.frontpanelexpress.eu</u>

FRONT PANEL

FYPRFSS



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.



Aluminium extrusion

Front panels for module with pull-handle mechanism, PICMG® AMC.0 R2.0

- Front panel for pull-handle mechanism (with cut-outs for light pipe)
- For AdvancedMC modules
- 2 front panel materials:
 - Stainless steel
 - Aluminium extrusion; for foil printing

Delivery comprises

Item	Qty	Description
1	1	U-shaped front panel

Order Information

Front panel for module with pull-handle mechanism, PICMG [®] AMC.0 R2.0	Part no. Aluminium	Part no. Stainless steel
Single compact, 3 HP	30849-708	30849-402
Single mid-size, 4 HP	30849-658	30849-403
Single full-size, 6 HP	30849-682	30849-404
Double compact, 3 HP	30849-714	30849-405
Double mid-size, 4 HP	30849-670	30849-406
Double full-size, 6 HP	30849-694	30849-407

Note

- Locking mechanism for front panel see page 8.61
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, <u>www.frontpanelexpress.eu</u>

FRONT PANEL EXPRESS



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Stainless steel

2 3 7 1 3 5 4 6 8 9

Pull-handle mechanism

Pull-handle mechanism, PICMG® AMC.0 R2.0

- Complete pull-handle mechanism, designed for microswitch activation (hot-swap), includes light pipe
- For AdvancedMC modules

Delivery comprises (kit)

Item	Qty	Description
2	1	Accepts light pipe and board bracket at top, Zn die-cast, nickel-plated
3a	1	Light pipe, top, PC, UL 94 V-0
3b	1	Light pipe, bottom, PC, UL 94 V-0
4	1	Pull-handle mechanism with microswitch activation and board bracket
5+6	1	Pull-handle, PC, UL 94 V-0, black
7	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
8	1	Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
9	1	Assembly kit

Order Information

Pull-handle mechanism, PICMG® AMC.0 R2.0	Part no.
For single compact, 3 HP	20849-151
For single mid-size, 4 HP	20849-152
For single full-size, 6 HP	20849-153
For double compact, 3 HP	20849-154
For double mid-size, 4 HP	20849-155
For double full-size, 6 HP	20849-156

■ Front panel for pull-handle mechanism page 8.60



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Modules with ruggedized pull-handle mechanism (MicroTCA.1 or MicroTCA.4), shielded

- Module in accordance with AdvancedMC standard
- Modules conform to:

 PICMG[®] AMC.0 R2.0

 Ruggedized: MicroTCA.1, MicroTCA.4
- Mounts in MicroTCA chassis or AdvancedMC carrier (e.g. cutaway, conventional or hybrid carrier)
- Stainless steel front panel
- Additional securing of components in MicroTCA system; with patented screw locking

Delivery comprises (kit)

Item	Qty	Description
1	1	U-shaped front panel, stainless steel; with welded-on screw locking, Torx T10
2	1	Board support, die-cast zinc, nickel-plated
3a	1	Light pipe, top, PC, UL 94 V-0
3b	1	Light pipe, bottom, PC, UL 94 V-0
4	1	Pull-handle mechanism with microswitch activation and board bracket
5+6	1	Pull-handle, PC, UL 94 V-0, black
7	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
8	1	Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
9	1	Assembly kit

Order Information

Module with ruggedized	Н	h	h1	Part no.
pull-handle mechanism	mm	mm	mm	
Single compact, 3 HP	95.0	73.8	60.8	21850-066
Single mid-size, 4 HP	95.0	73.8	60.8	21850-067
Single full-size, 6 HP	95.0	73.8	60.8	21850-068
Double compact, 3 HP	170.0	148.8	135.8	21850-069
Double mid-size, 4 HP	170.0	148.8	135.8	21850-070
Double full-size, 6 HP	170.0	148.8	135.8	21850-071

Accessories

Microswitch for AdvancedMC modules "normally	20849-20
open" for soldering (SMD), PU 10 pieces - page 8.67	20849-20
In 18-14 dead a succession	

Individual components

Screw locking (patented) for ruggedized front panel Screw retainer must be welded to front panel (screw, 21850-057 expansion bolt, bushing; fitted), PU 10 pieces

Note

- Filler modules MicroTCA.1 and MicroTCA.4 see from page 8.64
- Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, www.frontpanelexpress.eu

FRONT PANEL

EXPRESS

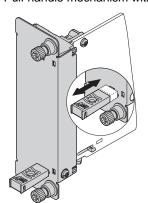


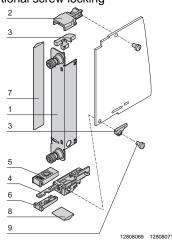
For further information www.schroff.biz/oneclick oneClick search code = Part no.

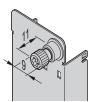


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Pull-handle mechanism with additional screw locking

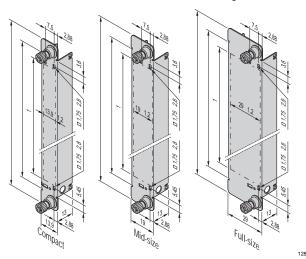






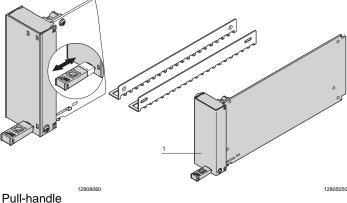
Steel, stainless

12808072 12809001 Screw locking

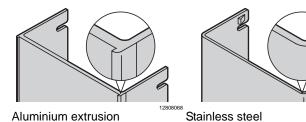




Filler module ECO, single, with air baffle



mechanism



Filler modules with pull-handle mechanism

- Shielded filler modules are used to close unused slots
- The optional air baffle (airflow adjustable) can be used to prevent an air short-circuit
- For conventional, cutaway and hybrid carrier
- Pull-handle mechanism meets AdvancedMC standard; pull handle to extract sub-assembly
- 2 front panel materials:
 - Stainless steel
 - Aluminium extrusion; for foil labelling

Delivery comprises (assembled)

Item	Qty	Description
1	1	AdvancedMC filler module, consisting of
	1	U-shaped front panel, stainless steel or Al extrusion
	1	Board support, die-cast zinc, nickel-plated
	1	PCB
	1	Pull-handle mechanism and board bracket
	1	Pull-handle, plastic, PC, UL 94 V-0, black
	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
	1	Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating

Order Information

Filler module with pull-handle mechanism	Part no. Aluminium	Part no. Stainless steel
Single compact, 3 HP	20849-304	20849-022
Single mid-size, 4 HP	20849-248	20849-106
Single full-size, 6 HP	20849-250	20849-024
Double compact, 3 HP	20849-305	20849-023
Double mid-size, 4 HP	20849-249	20849-107
Double full-size, 6 HP	20849-251	20849-025

Note

- Please order air baffle separately, see page 8.63
- Low-cost alternative: Filler module with fixed handle, see page 8.66

Air baffle for AdvancedMC filler modules



Item	Qty	Description
1	1	Metal sheet with perforation, Al
2	1	Sliding metal sheet with perforation, Al
3	1	Assembly kit

Order Information

Description	Qty/PU	Part no.
Air baffle for compact filler module	10	20849-016
Air baffle for mid-size filler module	10	20849-017
Air baffle for full-size filler module	10	20849-018

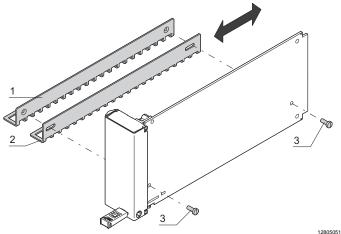


Photo shows mid-size double module

MicroTCA filler modules with air baffle

- Shielded filler modules are used to close unused slots and together with the air baffle prevent air short-circuits through the unused slot
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Can be screwed on; is inserted into the guide rail



Delivery comprises (assembled)

Item	Qty	Description
1	1	Front panel with side panel and air baffle, stainless steel, 1 mm; with captive screws (2 pieces)
2	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating

Order Information

Description	Part no.
MicroTCA filler module with air baffle, mid-size single	21850-104
MicroTCA filler module with air baffle, full-size single	21850-105
MicroTCA filler module with air baffle, mid-size double	21850-106
MicroTCA filler module with air baffle, full-size double	21850-107

Note

■ CAD data: Please enter part no. at www.schroff.biz/oneclick



Photo shows full-size single module

MicroTCA filler modules (above an MCH)

- Shielded filler modules are used to close unused slots
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Filler module is fitted above an MCH or PM when double modules are used
- Can be screwed on; is supported on the guide rail

NEW

Delivery comprises

Item	Qty	Description
1	1	Front panel, stainless steel, 1 mm; with captive screw (1 piece)
2	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating

Order Information

Description	Part no.
MicroTCA filler module with front panel, mid-size single	21850-102
MicroTCA filler module with front panel, mid-size double	21850-103

Note

■ CAD data: Please enter part no. at www.schroff.biz/oneclick



Photo shows AdvancedMC-Filler Modul, Single

MicroTCA filler modules, 2 HP

- Shielded filler modules are required e.g. if a mid-size or full-size AdvancedMC module is fitted in a 84 HP system
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Can be screwed on

Delivery comprises

Item	Qty	Description
1	1	Front panel, stainless steel, 0.6 mm
2	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating

Order Information

Description	Qty	Part no.
MicroTCA filler module, single, 2 HP	1 piece (SPQ 5)	20849-213
MicroTCA filler module, double, 2 HP	1 piece (SPQ 5)	20849-214

Delivery is exclusively made in Standard Pack Quantity (SPQ): Please order at least 5 pieces or a multiple. Pricing is per individual item.

Accessories

Pozidrive panhead screw	21102.024
M3 x 6, zinc-plated, 100 pieces	21102-024

Note

■ CAD data: Please enter part no. at www.schroff.biz/oneclick



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

RTM filler modules with air baffle

- Shielded RTM (rear transition module) filler modules are used to close unused slots and together with the air baffle prevent air short-circuits through the unused slot
- In accordance with MicroTCA.1 and MicroTCA.4 specifications
- Can be screwed on; is inserted into the guide rail
- With air baffle



Delivery comprises (assembled)

Item	Qty	Description
1	1	Front panel with side panel and air baffle, stainless steel, 1 mm; with captive screws (2 pieces)
2	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating

Order Information

Description	Part no.
RTM filler module with air baffle, mid-size double	21850-108
RTM filler module with air baffle, full-size double	21850-109



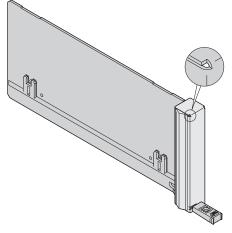
Photo shows full-size double module

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For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Filler module ECO, single, with air baffle



Single compact module

Filler module ECO with fixed handle

- Shielded filler modules are used to close unused slots
- The optional air baffle (airflow adjustable) can be used to prevent an air short-circuit
- For conventional, cutaway and hybrid carriers and MicroTCA
- Low-cost filler module (no pull- or push-pull-handle mechanism)

Delivery comprises (assembled)

Item	Qty	Description
1	1	AdvancedMC ECO filler module, consisting of
	1	Front panel, stainless steel
	1	PCB, plastic, PC, UL 94 V-0 with built-in air baffle holder
	1	Handle, fixed, plastic, PC, UL 94 V-0, black
	1	Lateral EMC gasket, core: foam, sleeve: textile cladding with CuNi coating
	1	Lower EMC gasket, core: foam, sleeve: textile cladding with CuNi coating

Order Information

	Part no.
Single compact, 3 HP	20849-348
Single mid-size, 4 HP	20849-350
Single full-size, 6 HP	20849-352
Double compact, 3 HP	20849-349
Double mid-size, 4 HP	20849-351
Double full-size, 6 HP	20849-353

Note

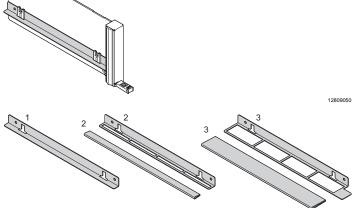
- Microswitch cannot be used
- Please order air baffle separately
- Filler modules with handle mechanism (pull- or push-pull-handles) see from page 8.63

Air baffle for filler module ECO with fixed handle

- Retrofittable; simply clip onto the PCB of the filler module
- To adjust the airflow volume the plastic cover can be individually cut to size (not for compact modules)

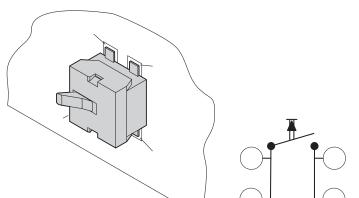
Order Information





Air baffle for filler module	Air baffle for filler modules ECO with fixed handle	
For compact filler module, PU 10 pieces	Item 1: VA plate	20849-355
For mid-size filler module, PU 10 pieces	Item 2a: VA plate with ventilation slots; Item 2b: plastic cover, PVC, UL 94 V-0	20849-356
For full-size filler module, PU 10 pieces	Item 3a: VA plate with ventilation slots; Item 3b: plastic cover, PVC, UL 94 V-0	20849-357

Systems - AdvancedMC-modules ServicePLUS



Microswitch for AdvancedMC modules

■ Microswitch for soldering (SMD)

Order Information

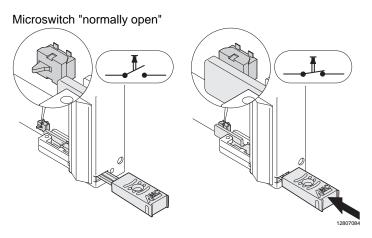
Description	Qty/PU	Part no.
Microswitch for AdvancedMC modules "normally open"	10	20849-209

Technical data

Max. switch current	1 mA, 5 V _{DC}
Operating temperature	-15 °C +70 °C
Electrical lifespan	10 ⁵ switching cycles



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.





modification

Custom drillings, cut-outs and special colours for off-the-shelf products

Small changes. Large impact.

- Mechanical modifications
- Ready for despatch within 10 working days



solution

Integration and custom developments

Simple. Fast. From one source.

■ Customised complete solutions

 Schroff offers extensive modification options with the Front Panel Service, including customised cut-outs, foils and silk-screen printing, www.frontpanelexpress.eu

FRONT PANEL EXPRESS

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units . . 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component system 11

Systems - CompactPCI subrack systems



12306002

What we understand to be a system

We at Schroff regard a system as being a combination of mechanical components like a subrack or case with electronic components such as a backplane and power supply unit, a cooling unit where appropriate and a system management module.

A strong standard range

Our extensive and highly-developed standard range offers you mechanical, electronic and thermal components in an almost unlimited variety of dimensions and specifications. Simply select a complete ready system or configure your system from our standard components, online or using the catalogue, to your exact requirements.

Flexibility for modifications

Often only small adjustments are needed to create the required solution from a standard product. And we have set ourselves up to offer just that. We can make modifications in accordance with your individual specifications - with our usual speed and reliability.

Competent with new developments

If your requirements cannot be met with standard products or modified standard solutions, our qualified and experienced team will create a customised solution for your system. We have all the necessary development and manufacturing competencies gathered under one roof.

Standards/Approvals

- Inner and outer dimensions in accordance with: IEC 60297-3-101 / IEEE 1101.1 IEC 60297-3-102 / IEEE 1101.10/11 IEC 60297-3-103
- Ingress protection IP 20 in accordance with IEC 60529
- EMC testing in accordance with IEC 61587-3
- In accordance with PICMG 2.0 rev. 3.0, PICMG 2.16 and PXI 2.0

Areas of application

- Measurement, control and instrumentation technology
- Automation technology, machine monitoring
- Aerospace
- Defence systems
- Medical technology
- Telecommunications





User manuals and technical documentation at www.schroff.biz/oneclick
Enter part number

Appendix 12



Downloads and further important information can be found on the Internet under www.schroff.biz

Systems - CompactPCI subrack systems

Overview 8.68

CompactPCI subrack and case systems

- Large selection of standard CompactPCI, PSB and H.110 systems
- Standard systems to the new CompactPCI PlusIO and CompactPCI Serial standards
- Individual configuration within 9 working days
- Custom solutions on request



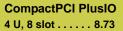
CompactPCI Serial

CompactPCI Serial (PICMG CPCI-S.0) is a systematic further development of CompactPCI. Instead of the former PCI bus, this defines the current and future serial protocols for data transmission. In addition to PCIe, S-ATA, USB 2.0 & 3.0 and Ethernet are also available on every slot.

CompactPCI Serial 4 U, 9 slot 8.70

CompactPCI PlusIO

CompactPCI PlusIO (PICMG 2.30) defines a unified pinout for the fast serial PCIe, S-ATA, USB and Ethernet protocols on the 32-bit CompactPCI system slot. Hybrid CompactPCI/CompactPCI Serial systems can be built. CompactPCI PlusIO thus offers simple migration to the new technology.





CompactPCI

12309004

30407004

CompactPCI (PICMG 2.0) was specified in 1995 and is based on the widely-used PCI bus. This bus, with the CompactPCI specification, is packaged in a robust modular 19" enclosure and is thus suitable for industrial use.

with ATX power supply,1, 2, 3 U. 8.76 with 19" power supply, 1, 2, 3 and 4 U. 8.77 3 U. 8.78 4 U. 8.79 6 U. 8.81 6 + 1 U. 8.82

CompactPCI

case systems

CompactPCI

subrack systems

PSB

PSB (Packet Switching Backplane, PICMG 2.16) and H.110 (Computer Telephony Bus, PICMG 2.5) are CompactPCI sub-specifications that define additional buses, specifically for telecommunications applications, in 6 U CompactPCI.

Subracks

CompactPCI subracks for building an individual CompactPCI system can be found in the subracks section, page 6.14

PSB plug-in units

4 U 8.84

7 U 8.85

4 U 8.86 10 U 8.87

Subracks Kit, shielded,

with/without rear I/O 6.14

ServicePLUS . . 8.112



ServicePLUS from page 8.112

e.g. individual configuration and assembly

e.g. modifications (integration)

e.g. downloads (CAD drawings,

user manuals, test reports)

e.g. custom solutions

www.schroff.biz/ServicePLUS

Main Catalogue



4 U, 9 slot, without rear I/O, with ATX PSU

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep, 9 slot
- Backplane
 - 9 slot, 3 U, CompactPCI Serial



- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount Slim-Line DVD and hard disk drives

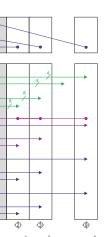
Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; front handles
2	9	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	1	Backplane for 3 U boards; 9 slot CompactPCI Serial (single star topology, part no. <u>23007-612</u>)
4	1	ATX PSU 300 W, 32 HP; wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan
5	1	Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fan
6	1	Module to accomodate a slimline DVD drive unit
7	1	3 U, 8 HP module to accommodate a hard disk drive
8	1	Front panel, front, 3 U, 8 HP
9	1	Front panel, rear, 3 U, 84 HP
10	1	Cable harness to connect all system components

1 8 7 9 6 4 2

Fr

12310050



Order Information

Height	Height	Width	Depth	Number of	Part no.
U	mm	HP	mm	slots	
4	177	84	275	9	24579-415
Accesso	ries				
Equipme		Page 3.38			
Front panels					Page 7.5
Modules to mount drive units					Page 8.110
Front panels with handle					Page 7.32
Fan control modules (FCM)					Page 8.108
Front par	nels with h	andle			Page 7.32

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG CPCI-S.0



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Backplane topology



ServicePLUS see page 8.112

Phys. Slot 🛧



12410052

4 U, 9 slot, with rear I/O and ATX PSU

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep, 9 slot
 - Rear, rear I/O: 3 U, 80 mm deep, 8 slot
- - 9 slot, 3 U, CompactPCI Serial



- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount Slim-Line DVD and hard disk drives

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; front handles
2	9	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 9 slot CompactPCI Serial (single star topology, part no. 23007-614)
5	1	ATX PSU 300 W, 32 HP; wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan
6	1	Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fan
7	1	Module to accomodate a slimline DVD drive unit
8	1	3 U, 8 HP module to accommodate a hard disk drive
9	1	Front panel, front, 3 U, 8 HP
10	1	Front panel, rear, 3 U, 4 HP
11	1	Front panel, rear, 3 U, 48 HP
12	1	Cable harness to connect all system components

12310002 11 12 10 5 3

4

Order Information

Height

Width

U m	nm	HP	mm	slots		
4 17	77	84	275	9	2457	9-420
Accessories	3					
Equipment c	ables				Page	3.38
Front panels	3				Page	7.5
Modules to r		Page	8.110			
Front panels	with han	dle			Page	7.32
Fan control modules (FCM) Page						8.108

Depth

Number of

Part no.

Note

Height

- Modified systems available on request
- System in accordance with IÉC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG CPCI-S.0



For further information www.schroff.biz/oneclick oneClick search code = Part no.

Backplane topology



ServicePLUS see page 8.112





4 U, 9 slot, 44 HP, without rear I/O, with 19" PSU

- System for vertical board mounting with board format Front: 3 U, 160 mm deep, 9 slot
- - 9 slot, 3 U, CompactPCI Serial



- 19" PSU, 250 W, 3 U, 8 HP
- Heat dissipation by two radial fans, from front to rear

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016
2	9	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	1	Backplane for 3 U boards; 9 slot CompactPCI Serial (part no. 23007-612)
4	1	Power backplane, 3 U, 8 HP with 1 x P47 connector (part no. 23098-105)
5	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>)
6	1	AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 Hz, max. current 10 A
7	2	Radial fan, 36 m ³ /h each, free blowing
8	1	Front panel, rear, 3 U, 36 HP
9	1	Cable harness to connect all system components

Order Information

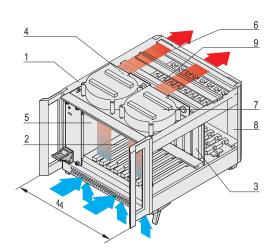
Height U	Height mm	Width HP	Depth mm	Number of slots	Part no.			
4	177	44	275	9	24579-606			
Accesso	Accessories							
Equipment cables Page 3								
Front par	Page 7.5							
Modules	Page 8.110							
Front par	Page 7.32							
Fan cont	Page 8.108							

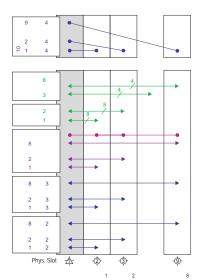
Fan control modules (FCM)				
Note				
■ Modified systems available on request				

System in accordance with IÉC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG CPCI-S.0



For further information www.schroff.biz/oneclick oneClick search code = Part no.





Backplane topology



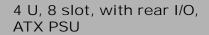


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- Front: 3 U, 160 mm deep, 8 slot
- Rear, rear I/O: 3 U, 80 mm deep, 3 slot

■ Backplane

- 4 slot, 3 U, 32 bit, CompactPCI
- 4 slot, 3 U, CompactPCI PlusIO
- Power Backplane

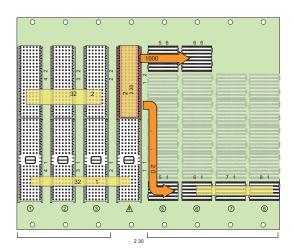
NEV

- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount a slimline DVD drive and hard disk

Delivery comprises (completely assembled, wired and tested)

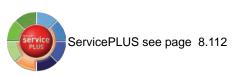
Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; front handles
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	3	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slots comprising 4 slots 32-bit CompactPCI plus 4 slots CompactPCI PlusIO (PICMG 2.30, part no. 23007-601)
5	1	ATX power supply, 300 W; 32 HP wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan
6	1	Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fan
7	1	Module to accomodate a slimline DVD drive unit
8	1	3 U, 8 HP module to accommodate a hard disk drive
9	1	Front panel, front, 3 U, 8 HP
10	1	Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP
11	1	Front panel, rear, 3 U, 24 HP
12	1	Front panel, rear, 3 U, 48 HP
13	1	Cable harness to connect all system components

3 4 10



Backplane topology

8





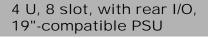
12409051

Order Information

Height U	Height mm	Width HP	Depth mm	Number of slots	Part no.
4	177	84	275	8	24579-405
Accesso	ries				
Equipment cables Pa					
Front pa	Page 7.5				
Modules to mount drive units					Page 8.110
Front pa	Page 7.32				
Fan cont	Page 8.108				

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



- System for vertical board mounting with board format

 - Front: 3 U, 160 mm deep, 8 slotRear, rear I/O: 3 U, 80 mm deep, 3 slot
- Backplane
 - 4 slot, 3 U, 32 bit, CompactPCI
 - 4 slot, 3 U, CompactPCI PlusIO
 - Power backplane
- 19"-compatible PSU, 250 W, 3 U, 8 HP
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top

NEW

■ Option to mount a hard disk

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; front handles
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	3	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slots comprising 4 slots 32-bit CompactPCI plus 4 slots CompactPCI PlusIO (PICMG 2.30, part no. 23007-601)
5	1	Power backplane, 3 U, 8 HP with 1 x P47 connector (part no. 23098-105)
6	1	19" compatible power supply, 250 W (3 U, 8 HP, part no. <u>13100-141</u>)
7	1	AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A
8	1	Hot-swap fan tray, extractable, 1 U, 3 x 12 V _{DC} fans
9	1	Front panel front, 3 U, 44 HP
10	1	Air baffle, 3 U, 160 mm deep
11	1	Front panel, rear, 3 U, 60 HP
12	1	Front panel, rear, 3 U, 4 HP
13	1	Cable harness to connect all system components

9

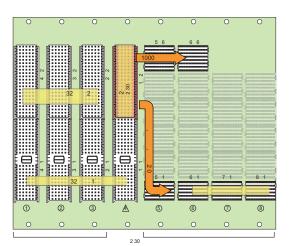
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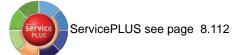
11 12



Backplane topology

3

10





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Order Information

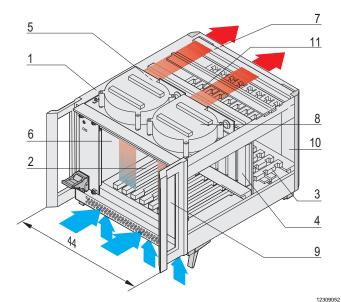
Height U	Height mm	Width HP	Depth mm	Number of slots	Part no.	
4	177	84	275	8	24579-400	
Accessories						
Equipment cables Page 3.38						
Front panels Page						
Modules to mount drive units Page 8.1						
Front panels with handle Page						
Fan control modules (FCM) Page 8.10						

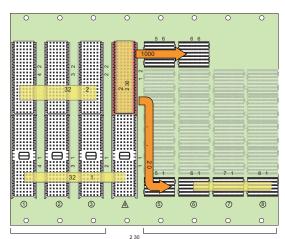
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30

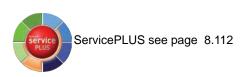








Backplane topology





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4 U, 8 slot, 44 HP, with rear I/O

- System for vertical board mounting with board format

 - Front: 3 U, 160 mm deep
 Rear I/O: 3 U, 80 mm deep, 3 slot
- Backplane
 - 4 slot, 3 U, 32 bit, CompactPCI
 - 4 slot, 3 U, CompactPCI PlusIO
 - Power Backplane
- 19" PSU, 250 W, 3 U, 8 HP
- Heat dissipation by two radial fans, from front to rear

Delivery comprises (completely assembled, wired and tested)

NEW

Item	Qty	Description
1	1	ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted at bottom front), for vertical boards (3 U, 160 mm deep)
3	3	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted at bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slots comprising 4 slots 32-bit CompactPCI plus 4 slots CompactPCI PlusIO (PICMG 2.30, part no. 23007-601)
5	1	Power backplane, 3 U, 8 HP with 1 x P47 connector part no. <u>23098-105</u>)
6	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>)
7	1	AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A
8	2	Radial fan, 36 m ³ /h each, free blowing
9	1	Front panel, front, 3 U, 4 HP, removable
10	1	Front panel, rear, 3 U, 24 HP
11	1	Cable harness to connect all system components

Height U	Height mm	Width HP	Depth mm	Number of slots	Part no.
4	177	44	275	8	24579-605
Accessor	ries				
Equipme	nt cables				Page 3.38
Front par	nels				Page 7.5
Modules	to mount d	rive units			Page 8.110
Front panels with handle					Page 7.32
Fan conti	rol module:		Page 8.108		

- Modified systems available on request
- System in accordance with IÉC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



Systems, 1, 2, 3 U, with rear I/O and ATX PSU



- Front: 6 U, 160 mm deep
- Rear, rear I/O: 6 U, 80 mm deep
- Backplane: 2, 4, 6 slot, 64 bit; system slot on left
- ATX PSU
- Heat dissipation by extractable hot-swap fan unit; in 1 U system from right to left; in 2 and 3 U systems from left to right



Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, St, powder-coated, black, RAL 9005
2	1	Number of front slots see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted to front left), for horizontal board mounting (6 U, 160 mm deep)
3	1	Number of rear slots see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted to front left), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane for 6 U boards, for number of slots see Order Information, 64 bit; system slot on the left
5	1	ATX PSU, wide input range 100 240 V _{AC} (rating data see Order Information); IEC plug, switch (controls DC power only), LED (Power ON); Fan
6	1	Hot-swap fan unit, number of fans see Order Information
7	1	Mains switch
8	1	Cable harness to connect all system components



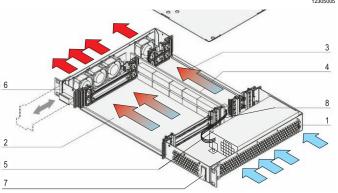
- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30

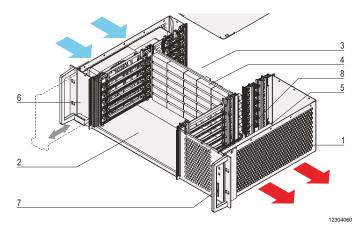


For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.









Order Information

Heig	ght	Depth	Backplane	Fan unit	Power supply	Part no.
U	mm	mm	Slots	Number of fans		
1	43.65	275	2 slot, 6 U	4	ATX 250 W, 3.3 V/14 A, 5 V/23 A, 12 V/16 A, -12 V/0.5 A	24579-077
2	88.10	275	4 slot, 6 U	2	ATX 250 W, 3.3 V/14 A, 5 V/20 A, 12 V/16 A, -12 V/0.8 A	24579-081
3	132.55	275	6 slot, 6 U	1 *)	ATX 300 W, 3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A	24579-079

*) Systems with additional heat dissipation in rear I/O space for 3 U systems available on request

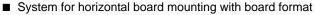


ServicePLUS see page 8.112



Accessories	
Equipment cables	Page 3.38
Front panels	Page 7.5
Modules to mount drive units	Page 8.110
Front panels with handle	Page 7.32
Fan control modules (FCM)	Page 8.108

Systems, 1, 2, 3, 4 U, with rear I/O, for 19" PSU

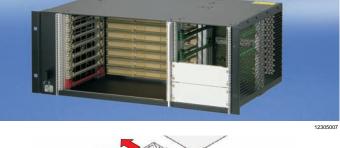


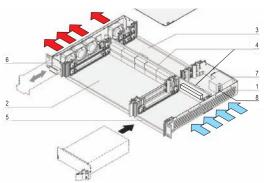
- Front: 6 U, 160 mm deep
- Rear, rear I/O: 6 U, 80 mm deep
- Monolithic backplane for signals and power
 - 2, 4, 6, 8 slot, 6 U, 64 bit; system slot on left
 - Power plug to PICMG 2.11 (P 47)
- Prepared for installation of 19" CompactPCI PSUs (3 U, 8 HP)
- Heat dissipation by extractable hot swap fan unit; 1 U system from right to left; in 2, 3 and 4 U systems from left to right

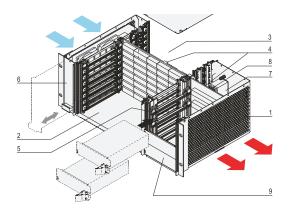
Delivery comprises (completely assembled, wired and tested)

	_	
Item	Qty	Description
1	1	Shielded 19" chassis, St, powder-coated, black, RAL 9005
2	1	Number of slots to front see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted front right), for horizontal board mounting (6 U, 160 mm deep)
3	1	Number of rear slots see Order Information; IEEE guide rails, incl. ESD clips (ESD clips fitted front right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Monolithic backplane for 6 U boards and voltage supply, for number of slots see Order Information, 64 bit; system slot left, in accordance with PICMG 2.0 rev. 3.0, voltage supply: 1 x P 47 socket for 1 U, 2 x P 47 socket for 2, 3, 4 U
5	1	Installation space for 19" CompactPCI power supply unit (3 U, 8 HP; For quantity see Order Information)
6	1	Hot-swap fan unit, number of fans see Order Information
7	1	AC input (IEC plug), mains filter module, fuse, mains switch
8	1	Cable harness to connect all system components
9	1	3 U, 8 HP front panel, mounted at front, from 2 U system









Note

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- Modified systems available on request
- 48 V_{DC} version on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30

Order Information

Height	Height	Depth	Backplane	Fan unit	Power supply	Quantity	Part no.
U	mm	mm	Slots	Number of fans	(please order separately)	Connector type	
1	43.65	275	2 slot, 6 U	4	1	1 x P 47	24579-078
2	88.10	275	4 slot, 6 U	2	2	2 x P 47	24579-082
3	132.50	275	6 slot, 6 U	1 *)	2 3	2 x P 47	24579-080
4	177.00	275	8 slot, 6 U	4 *)	2 4	2 x P 47	24579-106
19" comp	19" compatible power supply, 250 W, 3 U, 8 HP Please order PSU separately, see page 9.22					13100-141	

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^{*)} Systems with additional heat dissipation in rear I/O space for 3 U and 4 U systems available on request





Accessories	
Equipment cables	Page 3.38
Front panels	Page 7.5
Modules to mount drive units	Page 8.110
Front panels with handle	Page 7.32
Fan control modules (FCM)	Page 8.108



12 11 5 6 10 7 8 2 9





System, 3 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit; system slot on right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by convection, upward from below
- Option to mount a slimline DVD drive and hard disk

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; 2 front handles
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted bottom front), for vertical boards (3 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	ATX power supply; 300 W; 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan
6	1	Module to accomodate a slimline DVD drive unit
7	1	3 U, 8 HP module to accommodate a hard disk drive
8	1	Front panel front, 3 U, 8 HP
9	1	Front panel, front, 3 U, 4 HP, to expand system slot to 8 HP
10	1	Front panel, rear, 3 U, 4 HP
11	1	Front panel, rear, 3 U, 48 HP
12	1	Cable harness to connect all system components

Order Information

Height	Height	Depth	Number of	Part no.
U	mm	mm	slots	
3	132.55	275	8	24579-031
Accessorie	es			
DC fan 12 \	V, air flow volu	ıme 140 m ³ /h	, 119 x 119 x 32 mn	n, 60713-600
1 piece				00713-000
Fan retaine	er for 119 x 1	19 x 32 mm fa	an, (E)PB foam,	24579-212
1 piece				24377-212
Fan tray, 1	24579-105			
assembled	24379-103			
Air filter consisting of filter holder and filter mat, PU 1 set				t 24579-033
Equipment cables				Page 3.38
Front panels				Page 7.5
Modules to mount drive units				Page 8.110
Front panels with handle				Page 7.32
Fan contro	Fan control modules (FCM)			

Note

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- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



12 8 7 5 2 6





System, 4 U, 8 slot, with rear I/O, ATX frame PSU

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit; system slot on right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, upward from below
- Option to mount a slimline DVD drive and hard disk

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; front handles
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	ATX power supply, 300 W; 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan
6	1	Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fans
7	1	Module to accomodate a slimline DVD drive unit
8	1	Module to accomodate a CD ROM drive, 3 U, 8 HP
9	1	Front panel, front, 3 U, 8 HP
10	1	Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP
11	1	Front panel, rear, 3 U, 4 HP
12	1	Front panel, rear, 3 U, 48 HP
13	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Width HP	Depth mm	Number of slots	Part no.	
4	177	84	275	8	24579-250	
Accesso	ries					
Air filter	Air filter consisting of filter holder and filter mat, PU 1 set 24579-03					
Equipment cables					Page 3.38	
Front panels					Page 7.5	
Modules to mount drive units					Page 8.110	
Front panels with handle					Page 7.32	
Fan control modules (FCM)					Page 8.108	

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30





15 16 10 14 6 11 12 3 4 13 2





System, 4 U, 8 slot, with rear I/O, 19"-compatible PSU

- System for vertical board mounting with board format

 - Front: 3 U, 160 mm deepRear, rear I/O: 3 U, 80 mm deep
- Backplane
 - 8 slot, 3 U, 32 bit; system slot on right
 - 8 HP wide CPU can be used, power backplane
- 19"-compatible PSU, 250 W, 3 U, 8 HP
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount a hard disk

Delivery comprises (completely assembled, wired and tested)

ltem	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; front handles
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	Power backplane, 3 U, 8 HP with 1 x P47 plug
6	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>)
7	2	AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A
8	1	Hot-swap fan tray, extractable, 1 U, 3 x 12 V _{DC} fans
9	1	Front panel front, 3 U, 8 HP
10	1	3 U, 8 HP module to accommodate a hard disk drive
11	1	Front panel front, 3 U, 24 HP
12	1	Air baffle, 3 U, 160 mm deep
13	1	Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP
14	1	Front panel, rear, 3 U, 4 HP
15	1	Front panel, rear, 3 U, 40 HP
16	1	Cable harness to connect all system components

Order Information

Height	Height	Width	Depth	Number	Part no.
U	mm	HP	mm	of slots	
4	177	84	275	8	24579-260
Accessories					
Air filter consisting of filter holder and filter mat, PU 1 set 24579-03					24579-033
Equipment cables					Page 3.38
Front panels					Page 7.5
Modules to mount drive units			Page 8.110		
Front panels with handle				Page 7.32	
Fan control modules (FCM)					Page 8.108

Note

- Modified systems available on request
- System in accordance with IÉC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30

10 6 11 11 2 8





6 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane
 - 8 slot, 6 U, 64 bit; system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by convection, from bottom to top
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; 2 front handles
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (6 U, 80 mm deep)
4	1	Backplane for 6 U boards; 8 slot, 64 bit (part no. 23006-868); system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	ATX power supply, 300 W, 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan
6	1	Module to accomodate a 5.25" DVD drive
7	1	Front panel, front, 6 U, 16 HP
8	1	Front panel, front, 6 U, 4 HP, removable, to expand system slot to 8 HP
9	1	Front panel, rear, 6 U, 4 HP
10	1	Front panel, rear, 6 U, 48 HP
11	1	Cable harness to connect all system components

Order Information

Height	Height	Depth	Number of	Part no.
U	mm	mm	slots	
6	265.9	275	8	24579-030
Accessories	;			
	air flow volume 2 mm, 1 piece	e 140 m ³ /h,		60713-600
Fan retainer 1 piece	for 119 x 119 x	32 mm fan, (E)PB foam,	24579-212
Fan tray, 1 U for 3 or 6 U CompactPCI systems (boards assembled vertically), 1 piece				24579-105
Air filter consisting of filter holder and filter mat, PU 1 set				24579-033
Equipment of	ables			Page 3.38
Front panels	3			Page 7.5
Modules to mount drive units			Page 8.110	
Front panels with handle				Page 7.32
Fan control	modules (FCN	1)		Page 8.108

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



11 8 12 10 6 4 9 12303057





System, 7 U, 8 slot, with rear I/O

- System for vertical board mounting with board format

 - Front: 6 U, 160 mm deepRear, rear I/O: 6 U, 80 mm deep
- Backplane
 - 8 slot, 6 U, 64 bit, system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by 1 U hot-swap fan unit, from bottom to top
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated top cover and base plate; Front handles
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (6 U, 80 mm deep)
4	1	Backplane for 6 U boards; 8 slot, 64 bit (part no. 23006-868; system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	ATX power supply, 300 W, 32 HP, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan
6	1	Hot-swap fan tray, extractable, 1 U, 2 x 12 V _{DC} fans
7	1	Module to accomodate a 5.25" DVD drive
8	1	Front panel, front, 6 U, 16 HP
9	1	Front panel, front, 6 U, 4 HP, removable, to expand system slot to 8 HP
10	1	Front panel, rear, 6 U, 4 HP
11	1	Front panel, rear, 6 U, 48 HP
12	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
7	310.35	275	8	24579-026
Accessorie	es			
Air filter co	24579-033			
Equipment cables				Page 3.38
Front panels				Page 7.5
Modules to mount drive units			Page 8.110	
Front pane	Page 7.32			
Fan contro	Page 8.108			

- Modified systems available on request
- System in accordance with IÉC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; backplane in accordance with PICMG 2.0 rev. 3.0 and 2.30



Systems - CompactPCI case systems

12309003

System, 4 U, 8 slot, 44 HP, with rear I/O

- System for vertical board mounting with board format
 - Front: 3 U, 160 mm deep
 - Rear, rear I/O: 3 U, 80 mm deep

■ Backplane

- 8 slot, 3 U, 32 bit, system slot on right
- 8 HP wide CPU can be used



- 19" PSU, 250 W, 3 U, 8 HP
- Heat dissipation by two radial fans, from front to rear

Delivery comprises (completely assembled, wired and tested)

ltem	Qty	Description
1	1	ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	Power backplane, 3 U, 8 HP with 1 x P47 plug
6	1	19" compatible power supply, 250 W (3 U, 8 HP; Part no. <u>13100-141</u>)
7	1	AC input module, 3 U, 8 HP; AC line filter, 110 250 V _{AC} , 50 60 HZ, max. current 10 A
8	2	Radial fan, 36 m ³ /h each, free blowing
9	1	Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP
10	1	Front panel, rear, 3 U, 4 HP
11	1	Cable harness to connect all system components

Order Information

Haiabt

U	mm	Wiath HP	mm	slots	Part no.
4	177	44	275	8	24579-604
Accessories					
Equipment cables					Page 3.38
Front panels					Page 7.5
Modules to mount drive units					Page 8.110
Front panels with handle					Page 7.32
Fan control modules (FCM)					Page 8.108

Number of



Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.0 rev. 3.0

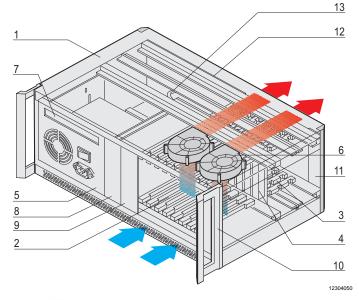


ServicePLUS see page 8.112



Systems - CompactPCI case systems







puting Specification



ServicePLUS see page 8.112

System, 4 U, 8 slot, with rear I/O

- System for vertical board mounting with board format

 - Front: 3 U, 160 mm deepRear, rear I/O: 3 U, 80 mm deep
- - 8 slot, 3 U, 32 bit, system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by two radial fans, front to rear
- Option to mount a slimline DVD drive and hard disk

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (3 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (3 U, 80 mm deep)
4	1	Backplane for 3 U boards; 8 slot, 32 bit (part no. 23006-818); system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	ATX power supply, 300 W, wide range input 100 240 V _{AC} , (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC AC input module with socket; mains switch; fan; 32 HP
6	2	Radial fan, 36 m ³ /h each, free blowing
7	1	Module to accomodate a slimline DVD drive unit
8	1	3 U, 8 HP module to accommodate a hard disk drive
9	1	Front panel, front, 3 U, 8 HP
10	1	Front panel, front, 3 U, 4 HP, removable, to expand system slot to 8 HP
11	1	Front panel, rear, 3 U, 4 HP
12	1	Front panel, rear, 3 U, 48 HP
13	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
U	111111	111111	31013	
4	177	275	8	24579-602
Accessori	es			
Spare fan	unit Air barrier	with 2 fitted ra	dial fans, 1 piece	24579-225
Equipmen	t cables			Page 3.38
Front panels				Page 7.5
Modules to mount drive units			Page 8.110	
Front panels with handle			Page 7.32	
Fan control modules (FCM)			Page 8.108	

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.0 rev. 3.0

Systems - CompactPCI case systems





Open Modular Computing Specifications



Systems, 7 U, 8 slot, with rear I/O

- System for vertical board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane
 - 8 slot, 6 U, 64 bit, system slot to right
 - 8 HP wide CPU can be used
- ATX PSU, 300 W
- Heat dissipation by two radial fans, from front to rear
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical rear I/O boards (6 U, 80 mm deep)
4	1	Backplane for 6 U boards; 8 slot, 64 bit (part no. 23006-868); system slot on right, 4 HP (8 HP wide CPU can be used)
5	1	ATX power supply, 300 W, wide input range 100 240 V _{AC} (3.3 V/28 A, 5 V/35 A, 12 V/22 A, -12 V/0.8 A); IEC-plug; mains switch; fan; 32 HP
6	2	Radial fan, 36 m ³ /h each, free blowing
7	1	Module to accomodate a 5.25" DVD drive
8	1	Front panel, front, 6 U, 16 HP, for fitting a hard disk drive
9	1	Front panel, front, 6 U, 4 HP, removable, to expand width of system slot to 8 HP
10	1	Front panel, rear, 6 U, 4 HP
11	1	Front panel, rear, 6 U, 48 HP
12	1	Cable harness to connect all system components

Order Information

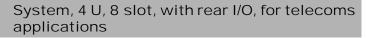
U mm mm slots 7 310.35 275 8 24579-612 Accessories Spare fan unit Air barrier with 2 fitted radial fans, 1 piece 24579-225 Equipment cables Page 3.38 Front panels Page 7.5 Modules to mount drive units Page 8.110 Front panels with handle Page 7.32 Fan control modules (FCM) Page 8.108	Height	Height	Depth	Number of	Part no.
Accessories Spare fan unit Air barrier with 2 fitted radial fans, 1 piece 24579-225 Equipment cables Page 3.38 Front panels Page 7.5 Modules to mount drive units Page 8.110 Front panels with handle Page 7.32	U	mm	mm	slots	
Spare fan unit Air barrier with 2 fitted radial fans, 1 piece24579-225Equipment cablesPage 3.38Front panelsPage 7.5Modules to mount drive unitsPage 8.110Front panels with handlePage 7.32	7	310.35	275	8	24579-612
Equipment cables Page 3.38 Front panels Page 7.5 Modules to mount drive units Page 8.110 Front panels with handle Page 7.32	Accessorie	es			
Front panels Page 7.5 Modules to mount drive units Page 8.110 Front panels with handle Page 7.32	Spare fan u	unit Air barrier	with 2 fitted ra	dial fans, 1 piece	24579-225
Modules to mount drive units Page 8.110 Front panels with handle Page 7.32	Equipment	Page 3.38			
Front panels with handle Page 7.32	Front pane	Page 7.5			
	Modules to mount drive units				Page 8.110
Fan control modules (FCM) Page 8.108	Front pane	Page 7.32			
	Fan contro	Page 8.108			

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.0 rev. 3.0



Systems - CompactPCI subrack systems, telecoms



- System for horizontal board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Monolithic backplane for (signals and power) 64-bit CompactPCI; PSB (Package Switched Backplane), PICMG 2.16; H.110
 - 8 slot, 6 U, 64 bit CompactPCI (2 fabric/switch slots, 6 node slots H.110), system slot to left
 - Integrated power backplane with 2 x P 47 connectors
- Prepared to accept two 19" CompactPCI PSUs 250 W (3 U, 8 HP)
- Heat dissipation by extractable hot-swap fan unit, from left to

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, St, powder-coated, black, RAL 9005
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to front right), for horizontal board mounting (6 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to front right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane for 6 U boards and voltage supply (2 x P 47 sockets); 64-bit CompactPCI; PSB, 2 fabric/switch slots; 6 node H.110 bus slots; part no. 23006-611
5	-	Prepared to accommodate two 19" CompactPCI PSUs (250 W, 3 U, 8 HP), part no. <u>13100-141</u>
6	1	Hot-swap fan unit, 4 fans, each 109 m ³ /h (64 cfm)
7	1	AC input (IEC plug), mains filter module, fuse, mains switch
8	1	Cable harness to connect all system components
9	2	Front panel front, 3 U, 8 HP

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
4	177	275	8	24579-135
Accessorie	es			
19" compatible power supply, 250 W, 3 U, 8 HP Please order PSU separately, see page 9.22				
Fan tray for black systems, to ventilate rear I/O space 7 fans				24579-112
Equipment cables Page 3.38				
Front panels			Page 7.5	
Modules to mount drive units			Page 8.110	
Front panels with handle			Page 7.32	
Fan control modules (FCM) Page 8.108				Page 8.108

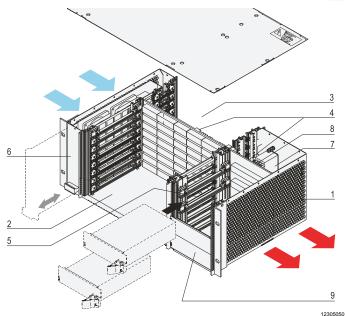
Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.16



For further information www.schroff.biz/oneclick oneClick search code = Part no.







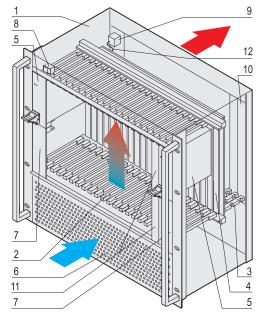




ServicePLUS see page 8.112

Systems - CompactPCI subrack systems, telecoms









System, 10 U, 16 slot, with rear I/O, for telecoms applications

- System for vertical board mounting with board format
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane, PSB (package switched backplane), PICMG 2.16
 16-slot, 6 U, 64 bit (2 fabric/switch slots, 14 node slots)
- Two 19" CompactPCI power supplies, 250 W (3 U, 8 HP), prepared for installation of two further 19" compatible PSUs
- Heat dissipation by fan module, from front to rear
- Prepared for system monitoring with a chassis monitoring module (CMM)

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; perforated front panel to front and rear, 19" bracket in RAL 9006; remaining parts passivated in aluminium; front handles (RAL 9005)
2	16	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical boards (6 U, 160 mm deep)
3	16	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to front bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	PSB backplane for 6 U boards, 64 bit, 2 fabric/switch slots, 14 node slots, 2 CompactPCI segments, system slot left and right; part no. 23006-610
5	2	19" compatible power supply, 250 W (3 U, 8 HP); part no. <u>13100-141</u>
6	1	Extractable fan unit with filter mat, 3 fans, 24 V _{DC} , 270 m ³ /h (160 cfm)
7	2	Front panel, front, 3 U, 8 HP, space for two further power supplies
8	1	DC switch on front
9	1	AC input (IEC connector), mains filter module, fuse, 6 U, 8 HP
10	1	Front panel, rear, 6 U, 8 HP
11	2	Front panel, front, 3 U, 4 HP, cover for optional CMM module space
12	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
10	443.7	275	16	24579-028
Accessories	s			
19" compati Please order	13100-141			
Chassis monitoring module (CMM) 3 U, 4 HP, 160 mm deep, 1 piece Please order PSU separately, see page 8.109				23207-022
Equipment cables			Page 3.38	
Front panels			Page 7.5	
Modules to mount drive units			Page 8.110	
Front panels with handle			Page 7.32	
Fan control	modules (F	CM)		Page 8.108

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11); Backplane, conforms to PICMG 2.16

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units . . 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component system 11

Systems - VME, VME64x, VXS, VPX



10006001

What we understand to be a system

We at Schroff regard a system as being a combination of mechanical components like a subrack or case with electronic components such as a backplane and power supply unit, a cooling unit where appropriate and a system management module.

A strong standard range

Our extensive and highly-developed standard range offers you mechanical, electronic and thermal components in an almost unlimited variety of dimensions and specifications. Simply select a complete ready system or configure your system from our standard components, online or using the catalogue, to your exact requirements.

Flexibility for modifications

Often only small adjustments are needed to create the required solution from a standard product. And we have set ourselves up to offer just that. We can make modifications in accordance with your individual specifications - with our usual speed and reliability.

Competent with new developments

If your requirements cannot be met with standard products or modified standard solutions, our qualified and experienced team will create a customised solution for your system. We have all the necessary development and manufacturing competencies gathered under one roof.

Standards/certifications

- Inner and outer dimensions in accordance with: IEC 60297-3-101 / IEEE 1101.1 IEC 60297-3-102 / IEEE 1101.10/11 IEC 60297-3-103
- Ingress protection IP 20 in accordance with IEC 60529
- EMC testing in accordance with IEC 61587-3
- In accordance with VITA 1-1994 and VITA 1.1-1997

Areas of application

- Measurement, control and instrumentation technology
- Automation technology, machine monitoring
- Aerospace
- Defence technology
- Medical technology
- Test systems

Us www.

User manual and technical documentation at www.schroff.biz/oneclick Enter order number



Appendix 12



Downloads and further important information can be found on the Internet under www.schroff.biz

Systems - VME, VME64x, VXS, VPX

Overview 8.88

Chassis and tower systems

- Standard systems from stock
- Individual configuration within 9 working days
- Robust mechanics, effective heat dissipation and EMC shielding



VME subrack systems

- 3 ... 8 U subrack systems, aluminium, silver
- With fan control module (FCM) for fan monitoring and control

VME subrack systems 3 U, 5 slot 8.90 4 U, 8 slot 8.91 7 U, 12 slot 8.92 8 U, 21 slot 8.93



VME64x subrack systems

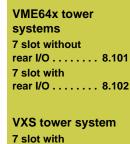
- Subrack systems
 - 1, 2 U, steel, black (RAL 9005)
 - 3 ... 10 U, aluminium, silver
- With fan control module (FCM) for fan monitoring and control

VME64x subrack systems 1 U, 2 slot 8.95 2 U, 4 slot 8.96 4 U, 8 slot 8.97 7 U, 12 slot 8.98 8 U, 21 slot 8.99 10 U, 21 slot 8.100



VME64x/VXS Tower systems

- Tower systems, aluminium, RAL 9006, RAL 7016
- With fan control module (FCM) for air monitoring and control
- Chassis suitable for use as a test system





VPX case system

- Case system, 4 U, RAL 9006, RAL 7016
- Well suited as test system

VPX case system 4 U, 5 slot 8.104

rear I/O 8.103



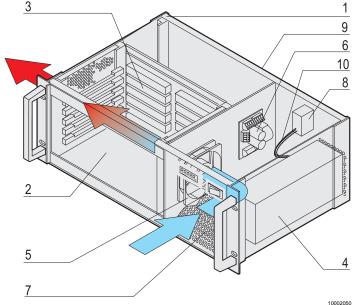
ServicePLUS from page 8.114

- e.g. individual configuration and assembly
- e.g. modifications (integration)
- e.g. downloads (CAD drawings, user manuals, test reports)
- e.g. custom solutions

www.schroff.biz/ServicePLUS

ServicePLUS . . 8.114









3 U, 5 slot

- System for horizontal board mounting with board formatFront: 6 U, 160 mm deep
- Backplane VME - 5 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 250 W
- Heat dissipation by 1 fan, from front to left; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with perforated side panels and front handles (RAL 7016)
2	5	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal board mounting (6 U, 160 mm deep)
3	1	Backplane VME for 6 U boards, 5 slots, J1/J2 monolithic (part no. <u>23001-065</u>)
4	1	Power supply unit, open frame; 250 W (part no.11098-316)
5	1	Fan; temperature-dependent speed control
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
7	1	Front panel, perforated, 3 U; display module; mains switch
8	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
9	1	Rear panel, Al
10	1	Cable harness to connect all system components

Order Information

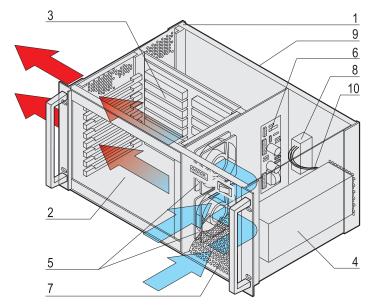
Height U	Height mm	Depth mm	Number of slots	Part no.
3	132.55	277.5	5	20836-310
Accessories				
Equipment cables Page 3.3				Page 3.38
Front panels				Page 7.5
Modules to mount drive units			Page 8.110	
Front panels with handle				Page 7.18
Fan control modules (FCM) Page 8				Page 8.108

Note

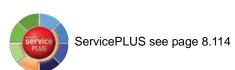
- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103;
 IEEE 1101.1, 1101.10/11;
 Backplane konform zu VITA 1.1-1994











4 U, 8 slot

- System for horizontal board mounting with board format
 Front: 6 U, 160 mm deep
- Backplane VME
 - 8 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by 2 fans, from front to left; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with perforated side panels; front handles (RAL 7016)
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal board mounting (6 U, 160 mm deep)
3	1	Backplane VME for 6 U boards, 8 slots, J1/J2 monolithic (part no. <u>23001-068</u>)
4	1	Power supply unit, open frame; 444 W (400 W at < 180 V _{AC} ; part no. <u>11098-267</u>)
5	2	Fan; temperature-dependent speed control
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
7	1	Front panel, perforated, 4 U; display module; mains switch
8	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
9	1	Rear panel, Al
10	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.	
4	177	277.5	8	20836-415	
Accessorie	Accessories				
Equipment cables Page					
Front pane	Page 7.5				
Modules to mount drive units				Page 8.110	
Front pane	Page 7.18				
Fan contro	Page 8.108				

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103;
 IEEE 1101.1, 1101.10/11;
 Backplane konform zu VITA 1.1-1994

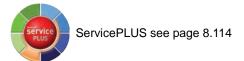




10 3 4 9 9

1 HE = 1 U





7 U, 12 slot

- System for vertical board mounting with board format
 Front: 6 U, 160 mm deep
- Backplane VME - 12 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by pull-out hot-swap fan unit, from bottom to top; filter mat; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; 19" bracket, with plain top cover and base plate (RAL 9006); front handles (RAL 7016)
2	12	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	1	Backplane VME for 6 U boards, 12 slots, J1/J2 monolithic (part no. 23001-072)
4	1	Power supply unit, open frame; 444 W (400 W at < 180 V _{AC} ; part no. <u>11098-267</u>)
5	1	Hot-swap fan tray with 3 fans, pull-out, 1 U; air filter; temperature-dependent speed control
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-028)
7	1	Front panel 6 U, 36 HP
8	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse, mains switch
9	1	Rear panel, hinged, Al, 6 U, 84 HP
10	1	Cable harness to connect all system components
		-

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
7 (1 + 6)	310.35	355	12	20836-715
Accessorie	s			
Air filter con	Air filter consisting of filter holder and filter mat, PU 1 set			
Backplanes				Page 10.15
Equipment cables			Page 3.38	
Front panels			Page 7.5	
Modules to mount drive units				Page 8.110
Front panels with handle				Page 7.18
Fan control modules (FCM)				Page 8.108

Note

30402059

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; Backplane konform zu VITA 1.1-1994

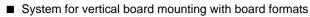


12 7

5

6 3 11

7 U, 12 slot, for transition modules



- Front: 6 U, 160 mm deepRear: 6 U, 12 HP, 80 mm deep; for transition modules
- Backplane VME
 - 12 slot, 6 U, J1/J2 monolithic
- PSU, open frame, 444 W (400 W at < 180 V_{AC})
- Heat dissipation by 3 fans, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; 19" bracket, plain top cover and base plate (RAL 9006); front handles (RAL 7016)
2	12	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	3	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical mounting of transition module (6 U, 80 mm deep) covered with EMC front panel 6 U / 12 HP
4	1	Backplane VME for 6 U boards, 12 slots, J1/J2 monolithic (part no. 23001-072)
5	1	Power supply unit, open frame; 444 W (400 W at < 180 V _{AC} ; part no. <u>11098-267</u>)
6	3	Fan; rear panel, hinged, 5 U, 84 HP; temperature-dependent speed control
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel 6 U, 36 HP
9	1	Display module
10	1	Mains switch
11	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
12	1	Cable harness to connect all system components

4 8 9 10 1

1 HE = 1 U





Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
7 (1/2 + 6 + 1/2)	310.35	355	12	20836-716
Accessories				
Backplanes F			Page 10.15	
Equipment cables				Page 3.38
Front panels				Page 7.5
Modules to mount drive units			Page 8.110	
Front panels with handle			Page 7.18	
Fan control modules (FCM)			Page 8.108	

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IÉEE 1101.1, 1101.10/11; Backplane konform zu VITA 1.1-1994





11 10 8 9

1 HE = 1 U





8 U, 21 slot

- System for vertical board mounting with board formats

 - Front: 6 U, 160 mm deepRear: 6 U, 12 HP, 80 mm deep; for transition modules
- Backplane VME
 - 21 slot, 6 U, J1/J2 monolithic
- \blacksquare PSU, open frame, 744 W (600 W at < 180 V_{AC})
- Heat dissipation by 3 fans, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al; 19" bracket, plain top cover and base plate (RAL 9006); front handles (RAL 7016)
2	21	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	3	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical mounting of transition module (6 U, 80 mm deep) covered with EMC front panel 6 U/12 HP
4	1	Backplane VME for 6 U boards, 21 slots, J1/J2 monolithic (part no. 23001-081)
5	1	Power supply unit, open frame; 744 W (600 W at < 180 V _{AC} ; part no. <u>11098-140</u>)
6	3	Fan; rear panel, hinged, 5 U, 84 HP; temperature-dependent speed control
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-021</u>)
8	1	Display module
9	1	Mains switch
10	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
11	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
8 (1 + 6 + 1)	354.8	355	21	20836-815
Accessories				
Backplanes	Page 10.15			
Equipment ca	Page 3.38			
Front panels	Page 7.5			
Modules to me	Page 8.110			
Front panels v	Page 7.18			
Fan control m	Page 8.108			

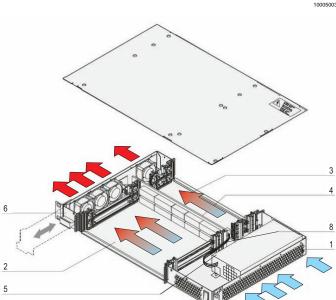
Note

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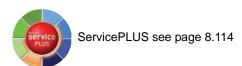
- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11; Backplane konform zu VITA 1.1-1994











1 U, 2 slot, with rear I/O

- System for horizontal board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 2 slot, 6 U, with P0 plug
- ATX PSU, 250 W
- Heat dissipation by pull-out hot-swap fan unit, from right to left
- Fan monitoring and voltage display

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, steel plate, black powder-coated (RAL 9005)
2	2	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep)
3	2	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane VME64x for 6 U boards, 2 slot, with P0 plug, with connector plug for fan unit and ATX PSU
5	1	ATX power supply; 250 W; wide range input 100 240 V_{AC} , output 3.3 V/14 A, 5 V/23 A, 12 V/16 A, -12 V/0.5 A; with IEC connector; mains switch; fan
6	1	Hot-swap fan unit with 4 fans; incl. fan monitoring and voltage display
7	1	DC switch (with LED), switches off only the DC output of the power supply unit, power ON
8	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.			
1	44.45	277.5	2	20836-145			
Accessories							
Equipment	Page 3.38						
Front panel	Page 7.5						
Modules to	Page 8.110						
Front panel	Page 7.18						

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

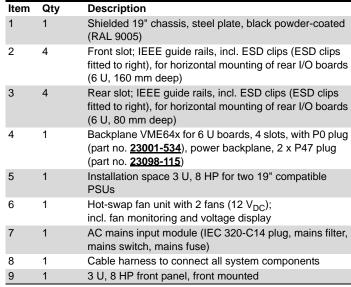


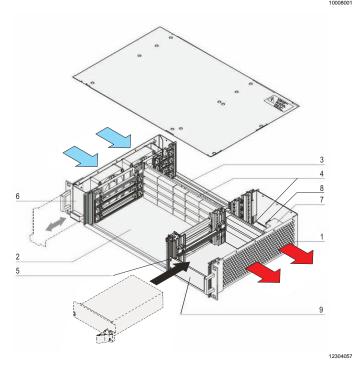


2 U, 4 slot, with rear I/O

- System for horizontal board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 4 slot, 6 U, with P0 plug
- Power backplane to PICMG 2.11 (P 47), prepared for installation of two 19" compatible PSUs, 250 W (3 U, 8 HP)
- Heat dissipation by pull-out hot-swap fan unit, from left to right
- Fan monitoring and voltage display

Delivery comprises (completely assembled, wired and tested)









Order Information

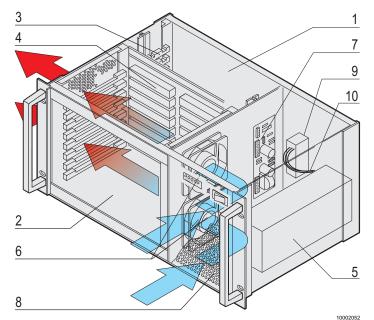
Height U	Height mm	Depth mm	Number of slots	Part no.				
2	88.1	277.5	4	20836-245				
Accessori	Accessories							
19" compa Technical d	13100-141							
Equipmen	Page 3.38							
Front pane	Page 7.5							
Modules to	Page 8.110							
Front pane	els with handle)		Page 7.18				

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IÉEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997











4 U, 8 slot, with rear I/O

- System for horizontal board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 8 slot, 6 U, without P0 plug
- PSU, open frame, 560 W (400 W at < 180 V_{AC})
- Heat dissipation by fan, from front to left
- Display module for DC operating voltages, fan and temperature

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, Al, with perforated side panels and front handles (RAL 7016)
2	8	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 160 mm deep)
3	8	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to right), for horizontal mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane VME64x for 6 U boards, 8 slots, without P0 plug (part no. 23001-508)
5	1	Power supply unit, open frame; 560 W (400 W at < 180 V _{AC} ; part no. <u>11098-212</u>)
6	2	Fan; temperature-dependent speed control
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-021</u>)
8	1	Front panel with ventilation openings, 4 U; display module, mains switch
9	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
10	1	Cable harness to connect all system components

Order Information

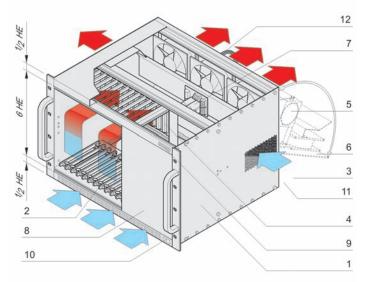
Height U	Height mm	Depth mm	Number of slots	Part no.			
4	177	277.5	8	20836-416			
Accessorie	Accessories						
Equipment	Page 3.38						
Front pane	Page 7.5						
Modules to	Page 8.110						
Front pane	Page 7.18						
Fan contro	ol modules (F	Fan control modules (FCM)					

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997







1 HE = 1 U





7 U, 12 slot, with rear I/O

- System for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear: 6 U, for 3 transition modules
- Backplane VME64x
 - 12 slot, 6 U, without P0 plug
- PSU, open frame, 642 W (600 W at < 180 V_{AC})
- Heat dissipation by fan, from front to rear
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

ltem	Qty	Description
1	1	Shielded 19" chassis, AI; with plain top cover and base plate (RAL 9006); front handle (RAL 7016); 19" bracket
2	12	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (6 U, 160 mm deep)
3	3	Rear slot; for transition modules, for vertical board mounting (6 U, 4 HP)
4	1	Backplane VME64x for 6 U boards, 12 slots, without P0 plug (part no. 23001-512)
5	1	Power supply unit, open frame; 642 W (600 W at $<$ 180 V_{AC} ; part no. <u>11098-207</u>)
6	3	Fan; on hinged rear panel; speed control 5 U, 84 HP
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel 6 U, 36 HP;
9	1	Display module
10	1	Mains switch
11	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
12	1	Front panel at rear with textile EMC gasket, 6 U, 12 HP
13	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.			
7 (1/2+6+1/2)	310.35	355	12	20836-717			
Accessories	Accessories						
Equipment cab	Page 3.38						
Front panels	Page 7.5						
Modules to mo	Page 8.110						
Front panels w	Page 7.18						
Fan control mo	Page 8.108						

Note

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- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997





12 3 4 4 4 5 5 2 2 11 10 7

1 HE = 1 U





8 U, 21 slot, with rear I/O

- System for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 21 slot, 6 U, with P0 plug
- PSU, open frame, 642 W (600 W at < 180 V_{AC})
- Heat dissipation by pull-out fan unit, from bottom to top; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Shielded 19" chassis, AI, with perforated top cover and base plate; front handles (RAL 7016), 19" bracket, front panels (RAL 9006)
2	21	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	21	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	Backplane VME64x for 6 U boards, 21 slots, with P0 plug (part no. 23001-551)
5	1	Power supply unit, open frame; 642 W (600 W at< 180 V _{AC} ; part no. <u>11098-207</u>)
6	1	Fan unit with 3 fans, 1.5 U (24 V _{DC} , 250 m³/h each, 148 cfm); temperature-dependent speed control; filter mat
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-028)
8	1	Front panel 0,5 U, 84 HP;
9	1	Display module
10	1	Mains switch
11	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
12	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.				
8	354.8	412	21	20836-820				
Accessories	Accessories							
Equipment of	Equipment cables Page 3.38							
Front panels	Page 7.5							
Modules to I	Page 8.110							
Front panels	Page 7.18							
Fan control	modules (F	CM)		Page 8.108				

Note

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- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997





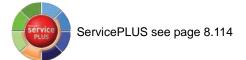
8 13 12 5 3 2 7 10

1 HE = 1 U



Main Catalogue

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10 U, 21 slot, with rear I/O

- System for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 21 slot, 6+1 U, with P0 plug
- PSU, open frame, 1000 W
- Heat dissipation by 2 pull-out fan units, from front to rear; temperature-controlled by fan control module (FCM)
- Display module for DC operating voltages, fan and temperature alarm

Delivery comprises (completely assembled, wired and tested)

ltem	Qty	Description
1	1	Shielded 19" chassis, AI, with plain top cover and base plate; front handles (RAL 7016), 19" bracket, front panels (RAL 9006)
2	21	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	21	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	VME64x backplane for 6 U boards + 1 U, 21 slots, with P0 connector
5	1	Power supply unit, open frame; 1000 W; wide range input, 100 240 V _{AC} output 3.3 V/60 A, 5 V/120 A, 12 V/17 A, -12 V/17 A; mounted fan
6	2	Fan module with speed-controlled radial fan (500 m³/h = 295 cfm each) for ventilation of boards; mounted behind hinged front panel (2 U)
7	1	Air filter
8	1	Fan control module (FCM) for fan monitoring/regulating (part no. <u>23207-021</u>)
9	1	Front panel, hinged, 2 U, 84 HP
10	1	Display module; mains switch, DC
11	1	Front panel, hinged, perforated, 2 U, 84 HP
12	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
13	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Depth mm	Number of slots	Part no.
10	443.7	456.5	21	20836-220
Accessori	es			
Fan modu	le 1 piece			20836-855
Chassis Notes	20836-223			
Equipmen	Page 3.38			
Front pane	Page 7.5			
Modules t	Page 8.110			
Front pane	Page 7.18			
Fan contro	Page 8.108			

Note

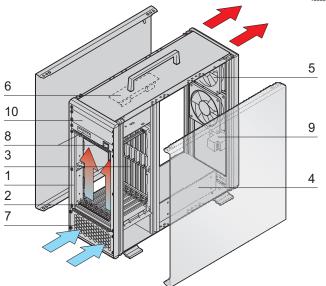
- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

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System - VME64x Tower systems









7 slot, without rear I/O

- Tower system for vertical board mounting with board format
 Front: 6 U, 160 mm deep
- Backplane VME64x
 - 7 slot, 6 U, without P0 plug
- PSU, open frame, 560 W (400 W at < 180 V_{AC})
- Heat dissipation by 2 fans, from front to rear; temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan alarm
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Tower system based on ratiopacPRO case, shielded, 500 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016
2	7	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	1	Backplane VME64x for 6 U boards, 7 slots, without P0 plug (part no. <u>23001-507</u>)
4	1	Power supply unit, open frame; 560 W (400 W at < 180 V _{AC} ; part no. <u>11098-212</u>)
5	2	Fan; speed-controlled; for ventilation of boards
6	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
7	1	Front panel, perforated, 4 U
8	1	Display module; mains switch
9	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
10	1	Module to accomodate a 5.25" DVD drive unit
11	1	Cable harness to connect all system components

Order Information

Height mm	Width mm	Depth mm	Number of slots	Part no.			
496.25	177.00	500	7	10836-050			
Accessorie	Accessories						
Equipmen	Page 3.38						
Front pane	Page 7.5						
Modules to	Page 8.110						
Front pane	Page 7.18						
Fan contro	Page 8.108						

Note

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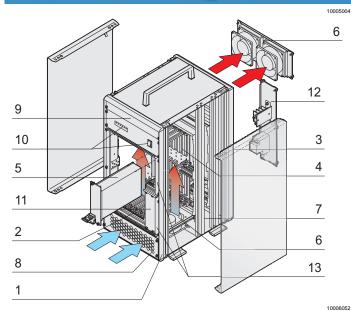
Modified systems available on request

 System in accordance with IEC 60297-3-101, 102, 103; IEEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997



System - VME64x Tower systems









7 slot, with rear I/O

- Tower system for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VME64x
 - 7 slot, 6 U, without P0 plug
- PSU, 19" compatible, 250 W; a second PSU can optionally be fitted
- Heat dissipation by 4 fans, from front to rear; temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan and temperature alarm
- Option to mount a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Tower system based on ratiopacPRO case, shielded, 300 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016
2	7	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	7	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	VME64x backplane for 6 U boards, 7 slots, without P0 connector
5	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>)
6	4	Fan; speed-controlled; for ventilation of boards
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel, perforated, 5 U
9	1	Module to accomodate a 5.25" DVD drive unit
10	1	Display module; mains switch
11	1	Front panel 3 U, 8 HP; removable, to allow fitting of a further chassis power supply unit
12	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
13	2	Front panel 3 U, 4 HP;
14	1	Cable harness to connect all system components

Order Information

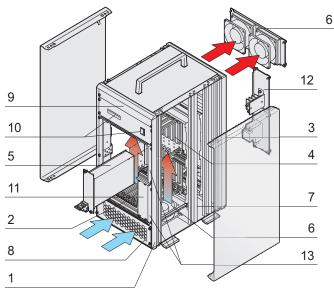
Height mm	Width mm	Depth mm	Number of slots	Part no.
496.25	221.45	300	7	10836-045
Accessorie	es			
19" compa 1 piece, tec	13100-141			
Air filter ki	20836-235			
Equipment	Page 3.38			
Front pane	Page 7.5			
Modules to	Page 8.110			
Front pane	Page 7.18			
Fan contro	l modules (FC	CM)		Page 8.108

Note

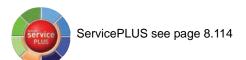
- Modified systems available on request
- System in accordance with IEC 60297-3-101, 102, 103; IÉEE 1101.1, 1101.10/11; backplane conforms to VITA 1.1-1997

Systems - VXS (VITA 41) Tower systems









7 slot, with rear I/O

- Tower system for vertical board mounting with board formats
 - Front: 6 U, 160 mm deep
 - Rear, rear I/O: 6 U, 80 mm deep
- Backplane VXS/VME64x
 - 4 slot VME64x, 6 U, with P0 plug
 - 3 x VXS payload slots connected as ring
- PSU, 19" compatible, 250 W; a second PSU can optionally be fitted
- Heat dissipation by 4 fans, from front to rear; temperature-controlled with fan control module (FCM)
- Display module for DC operating voltages and fan and temperature alarm
- Option of fitting a 5.25" DVD drive unit

Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	Tower system based on ratiopacPRO case, shielded, 300 mm deep, lateral parts in RAL 9006; handle, front frame and feet in RAL 7016
2	7	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical board mounting (6 U, 160 mm deep)
3	7	Rear slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom), for vertical mounting of rear I/O boards (6 U, 80 mm deep)
4	1	VXS backplane, 3 slots VME64x, 4 slot; for 6 U boards; with P0 connector; 3 x VXS payload slots, ring connected (part no. <u>23001-701</u>)
5	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>)
6	4	Fan; speed-controlled; for ventilation of boards
7	1	Fan control module (FCM) for fan monitoring/regulating (part no. 23207-021)
8	1	Front panel, perforated, 5 U
9	1	Module to accomodate a 5.25" DVD drive unit
10	1	Display module; mains switch
11	1	Front panel 3 U, 8 HP; for fitting a further plug-in power supply
12	1	AC mains input (IEC 320-C14 plug), mains filter, mains fuse
13	2	Front panel 3 U, 4 HP;
14	1	Cable harness to connect all system components

Order Information

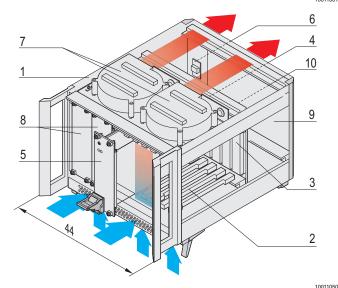
Height	Width	Depth	Number of	Part no.
mm	mm	mm	slots	
496.25	221.45	300	7	10836-060
Accessori	es			
19" compa	tible power s	upply, 250 W,	3 U, 8 HP	13100-141
1 piece, ted	13100-141			
Air filter ki	20836-235			
Equipmen	Page 3.38			
Front pane	Page 7.5			
Modules to	Page 8.110			
Front pane	Page 7.18			

Note

- Modified systems available on request
- System in accordance with IEC 60297-3-101, -102, -103; IEEE 1101.1, 1101.10/11;
- Backplane, conforms to VITA 41.0, -41.1, -41.10, -41.11

Systems - VPX case systems









4 U, 5 slot

- System for vertical board mounting with board format 3 U, 160 mm deep
- VPX backplane, in accordance with VITA 46, 5 slot, 3 U, 0.8" pitch, full mesh topology
- 19" PSU, 250 W, 3 U, 8 HP (further PSU optional)
- Heat dissipation by 2 radial fans, from front to rear



Delivery comprises (completely assembled, wired and tested)

Item	Qty	Description
1	1	ratiopacPRO-air case, RAL 9006, shielded, perforated air inlet/exhaust openings front and rear; front handles RAL 7016
2	5	Front slot; IEEE guide rails, incl. ESD clips (ESD clips fitted to bottom front), for vertical board mounting (3 U, 160 mm deep)
3	1	Backplane for 3 U boards; 5 slot VPX, full mesh topology
4	1	Power backplane, 3 U, 8 HP with 2 x P47 connector
5	1	19" compatible power supply, 250 W (3 U, 8 HP; part no. <u>13100-141</u>)
6	1	AC input module, rear, 3 U, 8 HP 110 250 V _{AC} , 50 60 HZ, max. current 10 A; AC line filter, switch, fuse
7	2	Radial fan, 36 m ³ /h each, free blowing
8	2	Front panel, front, 3 U, 8 HP
9	1	Front panel, rear, 3 U, 36 HP
10	1	Cable harness to connect all system components

Order Information

Height U	Height mm	Width HP	Depth mm	Number of slots	Part no.		
4	177	44	275	5	20836-444		
Accesso	Accessories						
Equipme	Equipment cables Page 3.3						
Front pa	Page 7.5						
Modules	Modules to mount drive units						
Front pa	Page 7.18						
Fan con	Fan control modules (FCM)						

Note

■ Modified systems available on request



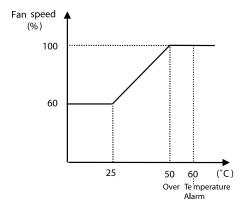
For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Main Catalogue

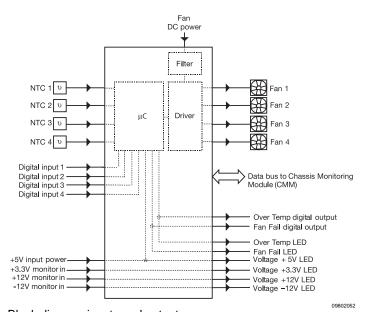
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Systems - VPX case systems

FCM with straight connector plug in the left picture caption, with angled connector plug in the left picture caption



Speed characteristics inputs and outputs



Block diagram inputs and outputs

Fan Control Modules (FCM)

- Monitoring and temperature dependent control of fan speed (controlled by µController)
- Up to 4 fans and 4 temperature sensors (NTC) can be connected
- Warning in the case of a malfunction (fan, sensor, µC, over temperature), increase of fan speed to maximum rpm
- Optional display of DC voltages, "Fan Fail" and "Over Temp"
- Remote monitoring if connected to Schroff chassis monitoring module (CMM)

Delivery comprises

Item	Qty	Description
1	1	Fan control module (FCM), width 38 mm, depth 160 mm, height 28 mm
2	1	Temperature sensor
3	1	Mating connector kit

Order Information

Fan Control Modules (FCM)	Height	Width	Depth	Part no.
	mm	mm	mm	
Connector plug, straight	28	38	160	23207-021
Connector plug, angled (90°), for mounting on pull-out Schroff fan unit	28	38	160	23207-028

Note

09802053

■ User manual: Please enter part number under www.schroff.biz/oneclick/





Status Monitor Temp. Voltage °C CMM 23 +3,3V FCM 24 °C +5.0VFan Speed +12,0V 61 -12,0V Fan Speed Setting Temperature CMM 25 l°C FCM 50 Fan Speed Temp. Alarm Fan 1 CMM 40 °C Fan 2

FCM

60

Chassis monitoring module (CMM)

- Monitoring of voltages, temperatures and digital inputs
- Communication and remote control via RS 232 or Ethernet interface (10BaseT)
- Inputs and outputs for VME specific and CPCI specific signals, further digital and LED outputs
- Data bus for communication with the Schroff Fan Control Module (FCM)
- Pluggable in 3 U euroboard format

Delivery comprises

Item	Qty	Description
1	1	Chassis monitoring module (CMM), height 3 U, depth 160 mm, width 4 HP, front panel fitted

Order Information

Description	Height	Depth	Part no.
	U	mm	
Chassis monitoring module (CMM)	3	160	23207-022

Note

 User manual: Please enter part number under www.schroff.biz/oneclick/

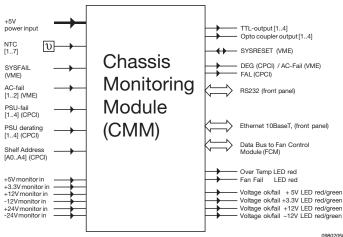


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For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

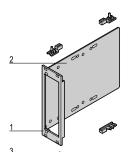
Status display via web browser

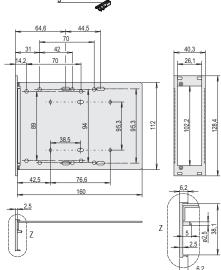
Fan 3



Block diagram inputs and outputs

Module to mount drive unit, with front panel, U profile, shielded 1 \times 3 1/2", 3 U vertical





Delivery comprises (kit)

Item	Qty	Description
1	1	U profile front panel with drive unit cut-out, Al, 2.5 mm, front anodised, rear colourless chromated, 2 alignment pins, stainless steel, pressed-in
2	1	Side panel, plug-in version, AI, 1.5 mm, chromated
3	4	Guide rail, PBT UL 94 V-0, red
4	1	Assembly kit

Order Information

Front panel dimensions		Part no.
Height	Width	
U	HP	
3	8	24579-042

Note

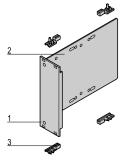
- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110

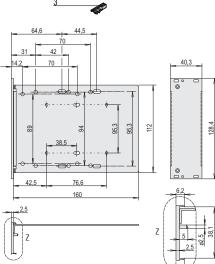


For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

KAA44883

Module to mount drive unit, with front panel, U profile, shielded HD 1 \times 3 1/2", 3 U vertical





Delivery comprises (kit)

Item	Qty	Description
1	1	U profile front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated; 2 alignment pins, stainless steel, pressed-in
2	1	Side panel, plug-in version, AI, 1.5 mm, chromated
3	4	Guide rail, PBT UL 94 V-0, red
4	1	Assembly kit

Order Information

Front panel dimens	ions	Part no.
Height H	Width B	
U	HP	
3	8	24579-043

Note

- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110

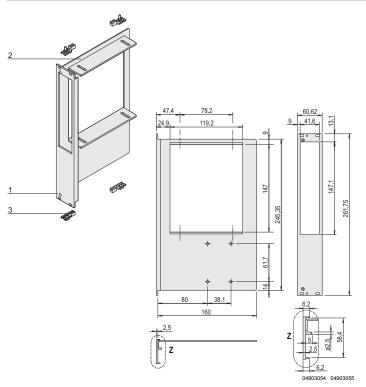


For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

KAA4489

8.108

Module to mount drive unit, with front panel, U profile, shielded, $1 \times 5 \frac{1}{4}$, HD 1 x 2.5", 6 U vertical



Delivery comprises (kit)

		•
Item	Qty	Description
1	1	U profile front panel with drive unit cut-out, AI, 2.5 mm, front anodised, rear iridescent green chromated
2	1	Side panel, plug-in version, AI, 1.5 mm, passivated
3	4	Guide rail, PBT, UL 94 V-0, red
4	1	Assembly kit

Order Information

Front panel dimensions		Part no.
Height	Width	
U	HP	
6	12	24579-074

Note

- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110



For further information <u>www.schroff.biz/oneclick</u> oneClick search code = Part no.

Module to mount drive unit, with front panel, U profile, shielded, for Slim Line CD/DVD, HD 1 x 2.5", 6 U vertical



Item	Qty	Description
1	1	U profile front panel, 6 U, 4 HP, with drive unit cut-out, Al, 2.5 mm, front anodised, rear iridescent green chromated
2	1	Side panel, plug-in version, AI, 1.5 mm, passivated
3	4	Guide rail, PBT, UL 94 V-0, red
4	1	Assembly kit

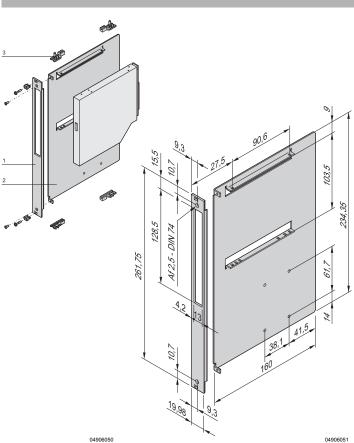
Order Information

Front panel dimensions		Part no.
Height	Width	
U	HP	
6	4	24579-230

Note

- Suitable for europacPRO, ratiopacPRO, CompactPCI, VMEbus and VME64xbus only
- Covers for drive unit cut-outs see page 8.110





Module to mount drive unit HD 1 x 3 1/2", 3 U vertical

Delivery comprises (kit)

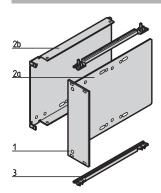
Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, front anodised, rear irisdescent green chromated
2a	2	Side panel, plug-in version, AI, 1.5 mm, passivated
2b	2	Side panel, screw-fixed version, AI, 2.0 mm, passivated
3	2	Guide rail, PPE, UL 94 V-0, black; only for plug-in version
4	1	Assembly kit

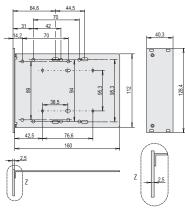
Order Information

KAA44896

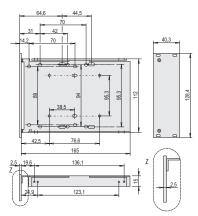
Front panel d	imensions	Plug-in	Screw-fixed
Height	Width	version	version
U	HP	Part no.	Part no.
3	8	20810-611	20810-605

- Please order assembly parts for drive units and guide rails for europacPRO and ratiopacPRO separately, see chapter Subracks - europacPRO
- Covers for drive unit cut-outs see page 8.110





Plug-in version



Screw-fixed version

Covers for drive unit cut-outs

■ Front panel is clipped into drive unit cut-out with clamping device

Delivery comprises (assembled)

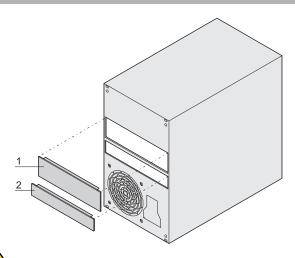
		•
Item	Qty	Description
1	1	Front panel, Al, 2 mm, anodised
2	1	Clamping device to clip-on, stainless steel

Order Information

Item	Description	Part no.
1	Cover for 5.25" (CD/DVD)	24496-120
2	Cover for Slim Line drive (CD/DVD)	24496-122

Note

■ Covers for 3.5" drive units available on request



06706053

Screws for drive units



Order Information

Description	Qty/PU	Part no.
Slotted flathead screws, M 3 x 6	100	21100-711
Pozidrive flathead screws, M 4 x 6	100	21100-574
Slotted flathead screw, 6-32 UNC x 6	100	21100-712

Cable for drive unit

■ The cable connects commercially available drive units with the

Order Information

Item	Description	Qty/PU	Part no.
2	Drive unit cable for 2 x 5 1/4", ring tag Ø M4, length 560 mm, connector AMP/Tyco 1-171822-4	1	20835-188



For further information www.schroff.biz/oneclick oneClick search code = Part no.

AC input module with filter

- Front panel (U front panel) for shielding with EMC textile gasket
- Voltage 110 V_{AC} ... 250 V_{AC}, 50 Hz ... 60 Hz
- Max. current 10 A at 40°C

Delivery comprises

1 1 U front panel 2.5 mm	Ī	ltem	Qty	Description	
front anodised, rear colourless chromated		1	1	U front panel, 2.5 mm, front anodised, rear colourless chromated	

Order Information

Height H	Width B	Part no.
U	HP	
3	8	24579-058
6	8	24579-059
Textile EMC seals	3 U, PU 10 pieces	21101-853
Textile EMC seals	3 U, PU 100 pieces	21101-854
Textile EMC seals	6 U, PU 10 pieces	21101-855
Textile EMC seals	6 U, PU 100 pieces	21101-856

Note

■ EMC profile seals are required to shield the front panels



For further information www.schroff.biz/oneclick oneClick search code = Part no.



2

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Systems - ServicePLUS



configuration

Simple. Fast. To the ideal product.

Components can be varied and combined freely

Our configurators help you select what you need

■ Online configuration: <u>www.schroff.co.uk/configuration</u>



assembly

Assembled by professionals. Double benefit!

Fitting of all mechanical, electrical and electronic components by our specialists

- From a quantity of 1, completely assembled and tested
- Ready for despatch within 10 working days



modification

Small changes. Large impact.

Custom drillings, cut-outs and special colours for off-the-shelf products

- Mechanical modifications, modifications of backplanes and PSUs, cabling
- Ready for despatch within 15 working days



solution

Simple. Fast. Out of one source.

- Integration and custom developments
- Air conditioning, complete assembly, function test
- Customised complete solutions



express

When fast has to be faster.

- Delivery time to customer's request
- System Express
- Further information: <u>www.schroff.co.uk/express</u>



support

Support. Solution. Availability.

Assistance if required

■ Telephone support



academy

Knowledge. Sharing. Partnerships.

Knowledge transfer and partnership

- Seminars, white papers, CAD drawings, test reports, user reports
- Further information: www.schroff.co.uk/academy



lifecycle

We are with you. For the entire product life.

Flexible support throughout the product lifecycle

■ Exchange service, maintenance, repairs, replacement parts

Systems - ServicePLUS

Application examples



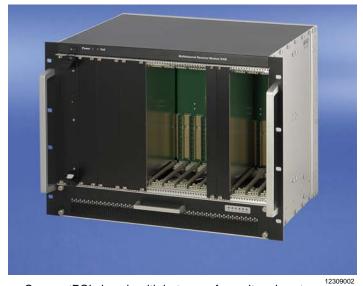
■ Hybrid system, modification of a MicroTCA single-module board cage into a 3 U chassis to DIN EN 60297



MicroTCA system, 1 U for 6 single mid-size AMC modules; power supply, increased air inlet and exhaust area with inwardly curved side panels



■ MicroTCA chassis with hot-swap fan unit and power supply



■ CompactPCI chassis with hot-swap fan unit and custom finishing



■ CompactPCI chassis with 48 V_{DC} power supply



■ 2 slot, 2 U AdvancedTCA chassis with custom colour

12709003

