

FO converters - FL MC ETH/FO 660 T - 2313164

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Ethernet T-coupler for converting from 2x RJ45 to 2x SC-RJ FO, 660 nm, 100 m distance with HCS fiber, for all network structures, redundancy with RSTP + FRD, configuration with WBM, IGMP snooping, multicast filtering, VLAN, SNMP, and port mirroring integrated.

Product Description

The compact 4-port media converter facilitates the flexible and economic establishment of managed Ethernet networks in an automation environment. Thanks to its SCRJ connections and extended temperature range of -20°C to +55°C, it fulfills the requirements of industrial applications perfectly. Its integrated software enables networks to be established, diagnosed, and monitored on a redundant basis using IT standard protocols.

Your advantages

- Configuration via web-based management
- Compact housing
- Continuous fiber optic monitoring via LED bar graph
- Alarm signal contacts
- Multicast filtering with IGMP snooping
- Redundant power supply
- Extended temperature range of -20°C to +55°C
- SNMP traps and values
- Port prioritization with V-LAN 802.1Q
- Port mirroring



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356477376
Weight per Piece (excluding packing)	230.000 g
Custom tariff number	85176200
Country of origin	Germany
Note	Made to Order (non-returnable)

FO converters - FL MC ETH/FO 660 T - 2313164

Technical data

Dimensions

Width	45 mm
Height	99 mm
Depth	123 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

Interfaces

Interface	Ethernet (RJ45)
No. of ports	2 (RJ45 ports)
Note on the connection method	Auto negotiation and autocrossing
Transmission physics	Copper
Transmission speed	10/100 Mbps
Transmission length	100 m (per segment)
Interface	POF/PCF
No. of ports	2 (SC-RJ)
Transmission physics	POF-SCRJ
Transmission speed	10/100 Mbps (full duplex)
Transmission length	up to 250 m (depending on the fiber used)

Function

Basic functions	Store-and-forward media converter standard-compliant IEEE 802.3 2, priority classes according to IEEE 802.1 P, TCP/IP protocol, BootP-compatible, port mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP)
Redundancy	RSTP (Rapid Spanning Tree Protocol)
	FRD (Fast Ring Detection)
	Large Tree Support
Supported browsers	Internet Explorer 5.5 or higher
Status and diagnostic indicators	2 status LEDs per Ethernet: activity and duplex mode, supply voltage U_{S1} and U_{S2} (redundant supply voltage) as well as LED BAR GRAPH for FO ports for displaying the system reserve for each optical interface.
Signal contact control voltage	24 V

Network expansion parameters

Cascading depth	Line, star, tree and redundant ring; any cascading depth
Maximum conductor length (twisted pair)	100 m

Supply voltage

Supply voltage	24 V DC
----------------	---------

FO converters - FL MC ETH/FO 660 T - 2313164

Technical data

Supply voltage

Residual ripple	3.6 V _{pp} (within the permitted voltage range)
Supply voltage range	18.5 V DC ... 30.5 V DC
Typical current consumption	400 mA (at U _S = 24 V DC)

General

Mounting type	DIN rail
Type AX	Book type
Net weight	230 g
Housing material	PA V0

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive 89/336/EC
Noise emission	EN 61000-6-3/-4
Noise immunity	EN 61000-6-2:2005
Vibration (storage/transport)	5g, 150 Hz, in acc. with IEC 60068-2-6
Vibration (operation)	in acc. with IEC 60068-2-6: 5g, 150 Hz

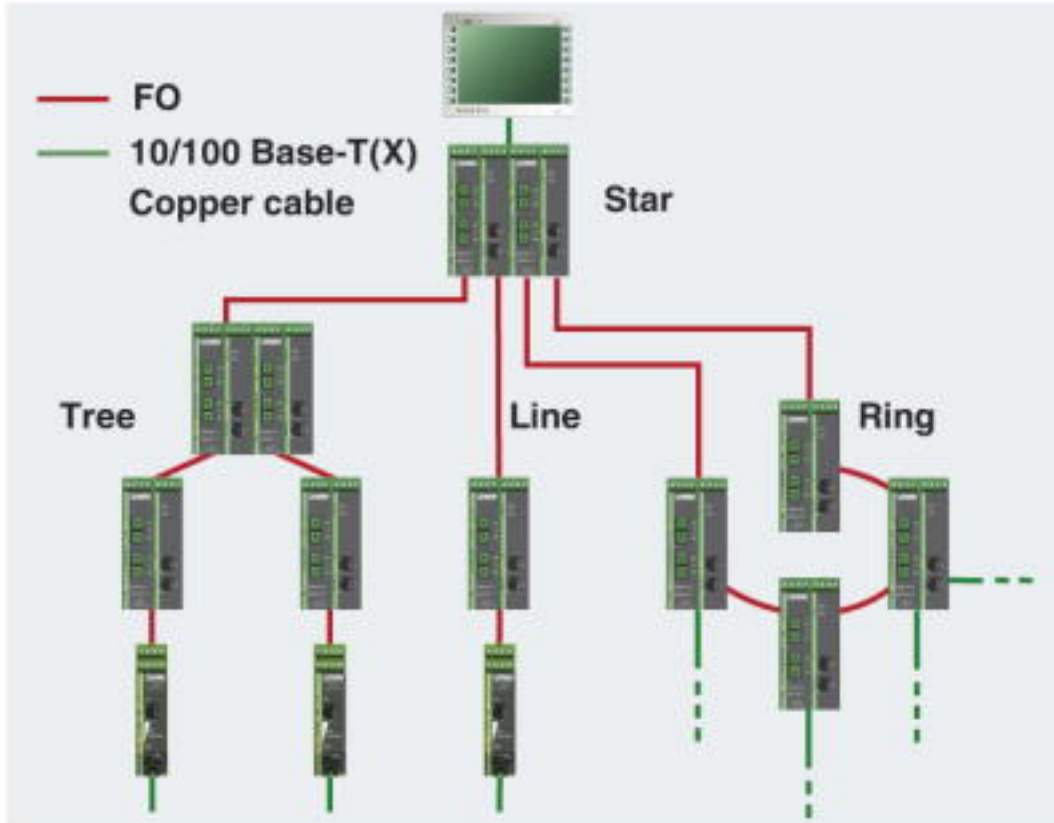
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

FO converters - FL MC ETH/FO 660 T - 2313164

Functional drawing



Classifications

eCl@ss

eCl@ss 4.0	27250500
eCl@ss 4.1	27250500
eCl@ss 5.0	27250500
eCl@ss 5.1	27250500
eCl@ss 6.0	19179200
eCl@ss 7.0	19179290
eCl@ss 8.0	19179290
eCl@ss 9.0	19170114

ETIM

ETIM 2.0	EC000310
ETIM 3.0	EC000310
ETIM 4.0	EC000310
ETIM 5.0	EC001467
ETIM 6.0	EC001467
ETIM 7.0	EC001467

FO converters - FL MC ETH/FO 660 T - 2313164

Classifications

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	43222604
UNSPSC 18.0	43223323
UNSPSC 19.0	43223323
UNSPSC 20.0	43223323
UNSPSC 21.0	43223323

Accessories

Accessories

Connector set

FO connectors - PSM-SET-SCRJ-DUP/2-HCS - 2313070



SC-RJ connector set for PCF fiber, for self-assembly, consisting of 2 duplex quick mounting connectors with bend protection, for a single wire diameter of 2.9 mm

Data cable by the meter

Network cable - FL CAT5 HEAVY - 2744814



CAT5-SF/UTP cable (J-02YS(ST)C HP 2 x 2 x 24 AWG), heavy-duty installation cable, 2 x 2 x 0.22 mm², solid conductor, shielded, outer sheath: 7.8 mm diameter, inner sheath: 5.75 mm ± 0.15 mm diameter

Network cable - FL CAT5 FLEX - 2744830



CAT5-SF/UTP cable (J-LI02YS(ST)C H 2 x 2 x 26 AWG), light-duty, flexible installation cable 2 x 2 x 0.14 mm², stranded, shielded, outer sheath: 5.75 mm ± 0.15 mm diameter

FO converters - FL MC ETH/FO 660 T - 2313164

Accessories

FO cable - FL FOC PN-C-HCS-GI-200/230 - 2313410



PROFINET HCS GI fiber cables, duplex 200/230 μm , increased bandwidth for Ethernet applications in particular. Robust PUR outer sheath. Heavy version suitable for drag chains and indoor installation, sold by the meter without plugs

FO cable - FL FOC PN-B-980/1000 - 2313397



PROFINET polymer fiber cable, duplex 980 μm /1000 μm , heavy-weight design, for installation in stationary systems and machines, by the meter, without male connector

FO cable - FL FOC PN-C-FLEX-980/1000 - 2313407



PROFINET polymer fiber cable, duplex, 980/1000 μm , heavy-weight highly flexible design, for flexible cable conduit applications, by the meter, without connector

Data plug

RJ45 connector - VS-08-RJ45-5-Q/IP20 - 1656725



RJ45 connector, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: PA, connection method: IDC fast connection, connection cross section: AWG 26- 23, cable outlet: straight, color: traffic grey A RAL 7042

DIN rail connector

DIN rail bus connectors - ME 22,5 TBUS 1,5/ 5-ST-3,81 GN - 2707437



DIN rail connector, number of positions: 5, pitch: 3.81 mm, pin layout: Linear pinning, Articles with gold-plated contacts, bus connectors for connecting with electronic housings

Plug

FO converters - FL MC ETH/FO 660 T - 2313164

Accessories

RJ45 connector - FL PLUG RJ45 GR/2 - 2744856



RJ45 connector, shielded, with bend protection sleeve, 2 pieces, gray for straight cables, for assembly on site. For connections that are not crossed, it is recommended that you use the connector set with gray bend protection sleeve.

RJ45 connector - FL PLUG RJ45 GN/2 - 2744571



RJ45 connector, shielded, with bend protection sleeve, 2 pieces, green for crossed cables, for assembly on site. For connections that are crossed, it is recommended that the connector set with green bend protection sleeves is used.

Power supply

Power supply unit - MINI-SYS-PS-100-240AC/24DC/1.5 - 2866983



Primary-switched MINI POWER supply for DIN rail mounting, input: 1-phase, output: 24 V DC/1.5 A

Assembly tool - FL CRIMPTOOL - 2744869



Crimping pliers, for assembling the RJ45 plugs FL PLUG RJ45..., for assembly on site

FO connectors - PSM-SET-SCRJ-DUP/2-POF - 2708656



SC-RJ connector set for polymer fiber, for self assembly, consisting of 2 duplex quick mounting connectors with bending protection

FO converters - FL MC ETH/FO 660 T - 2313164

Accessories

Assembly tool - PSM-HCS-KONFTOOL/SC-RJ - 2708876



HCS assembly kit for SC-RJ quick mounting connectors, including stripping blade, stripping pliers, aramide yarn scissors, fiber stripper, microscope, fiber cleaving tool for standard HCS and HCS GI fibers, two SC-RJ connectors for standard HCS fiber, and documentation

Assembly tool - PSM-POF-KONFTOOL - 2744131



Polymer fiber DIY case, consisting of: Stripping knife, stripping pliers, polishing wheels for F-SMA and SC-RJ quick mounting connectors, polishing pad and emery paper

FO connectors - PSM-SET-SCRJ-DUP/2-HCS/PN - 2313546



SC-RJ connector set for standard PROFINET PCF fiber cables with 2.2 mm diameter of the individual elements. Consisting of 2 duplex quick mounting connectors with bend protection for self-assembly.
