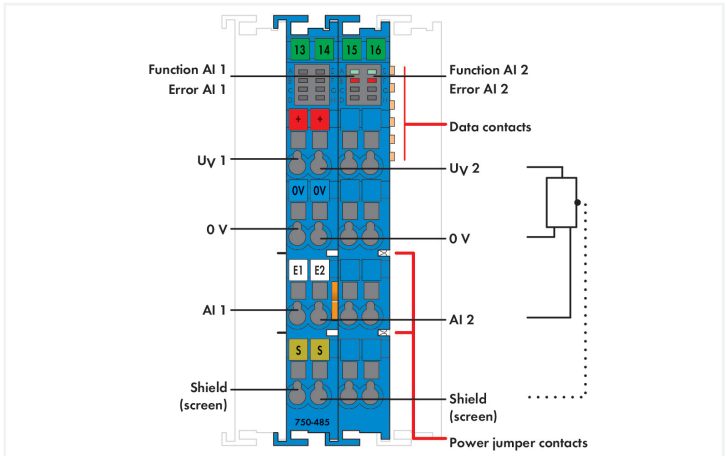
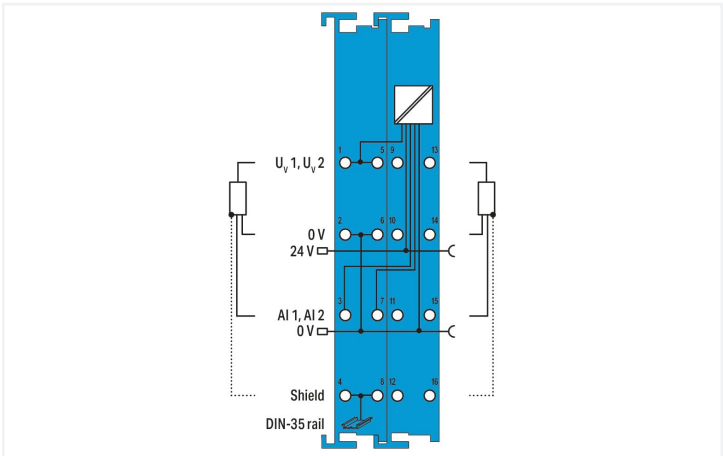
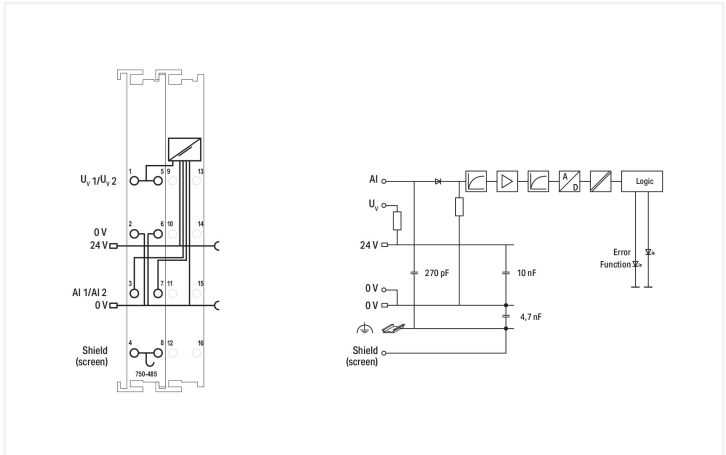




Color: ■ blue



This analog input module powers the intrinsically safe signal conditioners located in the hazardous areas of Zone 0+1 and processes their analog signals.

The WAGO I/O System 750 must be installed either in Zone 2 or in a non-hazardous area.

The 24 V supply is derived from the module's power jumper contacts.

The transmitter supply is non-inherently electronically short-circuit-protected.

The shield directly connects to the DIN-rail.

Indicators:

- Green LED (signal current on/off)
- Red LED (wire breakage, measurement range overflow/underflow)
- Field and system levels are electrically isolated.

Notes	
Note	The analog input module must only be operated via 24 VDC Ex ii! General information (e.g., installation regulations) on explosion protection is available in the WAGO I/O System 750 manuals!



Technical data		
Order Text	2-Channel Analog Input; 4 ... 20 mA	
Number of analog inputs	2	
Total number of channels (module)	2	
Signal type	Current	
Signal type (current)	4 ... 20 mADC	
Sensor connection	2 x (3-wire)	
Signal characteristics	Single-ended	
Sensor supply	DC 16 V	
Resolution [bit]	12 bits	
Conversion time (typ.)	2 ms	
Measurement error (reference temperature)	25 °C	
Measurement error, deviation (max.) from the upper-range value	0.2 %	
Temperature error (max.) of the upper-range value	0.01 %/K	
Input resistance (max.)	100 Ω	
Intrinsic safety Ex i	Yes	
Data width	2 x 16-bit data; 2 x 8-bit control/status (optional)	
Supply voltage (system)	5 VDC; via data contacts	
Current consumption (5 V system supply)	31 mA	
Supply voltage (field)	24 VDC; (Ex i power supply: U _o = max. 27.3 V); via power jumper contacts (power supply via blade contact; transmission via spring contact)	
Current consumption, field supply (module with no external load)	11 mA	
Power consumption P _{max.}	1.3 W	
Power loss P _I	0.75 W	
Isolation	300 VAC system/supply	
Number of incoming power jumper contacts	2	
Number of outgoing power jumper contacts	2	
Indicators	LED (A, E) green: Function AI 1, AI 2; LED (B, F) red: Error AI 1, AI 2	

Explosion protection		
Marking	ATEX/IECEx: II 3 (1) G Ex ec [ia Ga] IIC T4 Gc; II (1) D [Ex ia Da] IIIC; I (M1) [Ex ia Ma] I	
Ex standard	EN IEC 60079-0, -7, -11	
Safety-relevant data (circuit)	U _o = 27.3 V; I _o = 90 mA; P _o = 0.61 W; linear characteristic curve	
Reactances Ex ia IIC	L _o = 5 mH; C _o = 88 nF	
Reactances Ex ia IIB	L _o = 18 mH; C _o = 680 nF	
Reactances Ex ia IIA	L _o = 40 mH; C _o = 2.2 µF	
Reactances Ex ia I	L _o = 100 mH; C _o = 3.5 µF	
Reactances (note)	Reactances without accounting for the concurrence of capacitance (C _o) and inductance (L _o)	

Connection data		
Connection technology: inputs/outputs	16 x CAGE CLAMP®	
Connection type 1	Inputs/outputs	
Solid conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG	
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG	
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches	



Physical data	
Width	24 mm / 0.945 inches
Height	100 mm / 3.937 inches
Depth	67.8 mm / 2.669 inches
Depth from upper-edge of DIN-rail	60.6 mm / 2.386 inches

Mechanical data	
Mounting type	DIN-35 rail

Material data	
Color	blue
Housing material	Polycarbonate; polyamide 6.6
Fire load	2.379 MJ
Weight	97.6 g
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, marine applications
EMC emission of interference	per EN 61000-6-3, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data	
Product Group	15 (I/O System)
eCl@ss 10.0	27-24-26-01
eCl@ss 9.0	27-24-26-01
ETIM 8.0	EC001596
ETIM 7.0	EC001596
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
Customs tariff number	85389099990



Environmental Product Compliance	
CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Bulgaria)	5065582b-f270-43af-9e74-f9e23017a7b1
SCIP notification number (Czech Republic)	0170611b-8bdf-4c42-9ac1-72bd32bec088

Approvals / Certificates

General approvals

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-AIM750
UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Approval	Standard	Certificate Name
EU-Ex-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	22-2219060
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas



Approval	Standard	Certificate Name
AEx UL International Germany GmbH	UL 60079	E480271
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_12_ATEX_106032X (Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I)
CCC CNEX	CNCA-C23-01	2020312310000211 (Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 ([ExiaMa] X,2Ex e[iaGa]IIC T4Gc X,[ExiaDa]IIIC X)
INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	20-KA4BO-0643X
TUEV Nord TUEV Nord Cert GmbH	IEC 60079	IECEx TUN 12.0039X (Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1



Downloads			
Environmental Product Compliance			
Compliance Search			
Environmental Product Compliance 750-485			↓

Documentation			
Manual		System Description	
Product Manual 2-channel, 4-20mA, Ex i, single-ended	V 1.3.0	pdf	↓
		2049.58 KB	
System Manual WAGO I/O System 750/753	V 3.3.3 29.08.2023	pdf	↓
		8512.61 KB	
		750/753 Series I/O-System – General Product Information	↓
			953.35 KB
		Overview on WAGO-I/O-SYSTEM 750 approvals	↓
			770.48 KB
		Ex i Overview	↓
			442.07 KB
Bid Text		Instruction Leaflet	
750-485	19.02.2019	xml	↓
		6.15 KB	
750-485	06.10.2017	doc	↓
		31.50 KB	
		CCC Ex (Additional information)	↓
		26.04.2023	143.96 KB

CAD/CAE-Data			
CAD data		CAE data	
2D/3D Models 750-485		EPLAN Data Portal 750-485	↓
		WSCAD Universe 750-485	↓
		ZUKEN Portal 750-485	↓

Device Files			
Device Driver			
WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip	↓
		4721.96 KB	



1 Compatible Products			
1.1 Optional Accessories			
1.1.1 DIN-rail			
1.1.1.1 Mounting accessories			
			
Item No.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	Item No.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	Item No.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	Item No.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored
			
Item No.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	Item No.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	Item No.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	Item No.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored
			
Item No.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored	Item No.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored	Item No.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	Item No.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored
1.1.2 Marking			
1.1.2.1 Group marker carrier			
			
Item No.: 750-107 Group marker carrier			
1.1.2.2 Marker			
			
Item No.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	Item No.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	Item No.: 2009-145/000-023 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	Item No.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
			
Item No.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	Item No.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	Item No.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	Item No.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow
			
Item No.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue	Item No.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray	Item No.: 248-501/000-023 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green	Item No.: 248-501/000-017 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green
			
Item No.: 248-501/000-012 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange	Item No.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red	Item No.: 248-501/000-024 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet	Item No.: 248-501 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white
			
Item No.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow			



1.1.2.3 Marker carrier



[Item No.: 750-103](#)
Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles



[Item No.: 790-108](#)
Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



[Item No.: 790-208](#)
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



[Item No.: 790-116](#)
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



[Item No.: 790-216](#)
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



[Item No.: 790-124](#)
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



[Item No.: 790-220](#)
Shield clamping saddle; 30 mm wide; 6 ... 20 mm



[Item No.: 790-140](#)
Shield clamping saddle; diameter of compatible conductor

1.1.4 Supply module

1.1.4.1 Supply module



[Item No.: 750-606](#)
Power Supply; 24 VDC; Diagnostics; Intrinsically safe



[Item No.: 750-625/000-001](#)
Power Supply; 24 VDC; Intrinsically safe