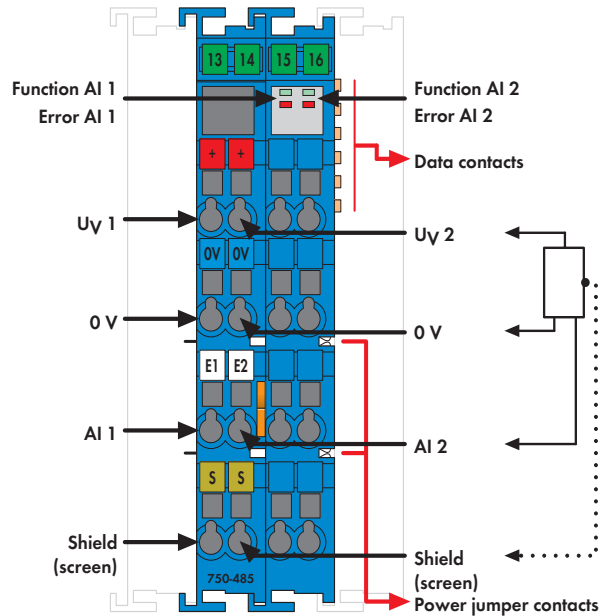


2-Channel Analog Input Module 4-20 mA, Ex i
Single-ended (S.E.)



Delivered without miniature WSB markers

The analog input module provides power to the intrinsically safe signal conditioners located in the hazardous 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 (screen) is directly connected to the DIN rail.

Field and system levels are electrically isolated.


Note:

Only use the analog input module in connection with the 24VDC Ex i Supply Module!

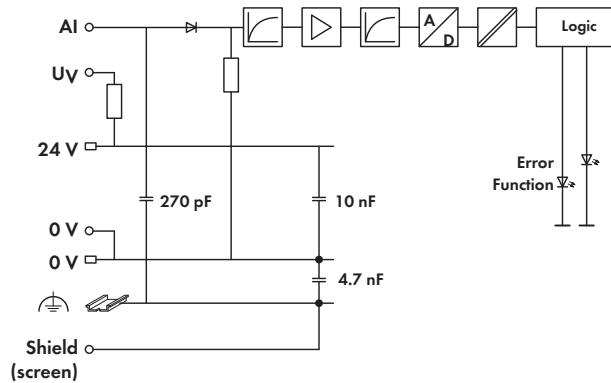
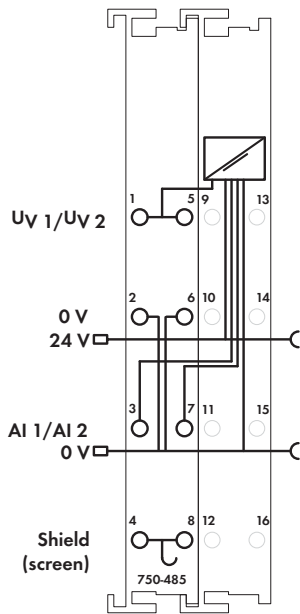
General information (e.g., installation regulations) on explosion protection is available in the WAGO-I/O-SYSTEM 750 manuals!

LED displays:

- Green LED (signal current on/off)
- Red LED (wire breakage, measuring range overflow/underflow)

Description	Item No.	Pack. Unit
2AI 4-20mA Ex i	750-485	1
Accessories		
Miniature WSB Quick marking system		
 plain	248-501	5
with marking	see Section 11	

Technical Data	
Number of inputs	2
Current consumption, system voltage typ. (5 VDC)	31 mA
Voltage via power jumper contacts	24 V DC (provided via Ex-i supply $U_o = \text{max. } 27.3 \text{ V}$)
Transmitter supply	$U_v = 16 \text{ V}$ at 20 mA
Signal current	4 ... 20 mA
Input resistance	< 100 Ω
Resolution	12 bits
Conversion time	< 2 ms
Measuring error (25 °C)	< $\pm 0.2 \%$ of the full scale value
Temperature coefficient	< $\pm 0.01 \%$ / K of the full scale value
Current consumption, power jumper contact typ. (24 VDC)	11 mA + load
Power consumption P_{max}	1.3 W
Power loss P_v	0.75 W
Isolation	$U_M = 375 \text{ V}$ system/supply
Bit width	2 x 16 bits data 2 x 8 bits control / status (optional)



Technical Data	
Wire connection	CAGE CLAMP [®]
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Strip lengths	8 ... 9 mm / 0.33 in
Width	24 mm
Weight	48.5 g
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications

Explosion Protection	
Electric circuit, safety-relevant data	U _o = 27.3 V ; I _o = 90 mA; P _o = 0.61 W; Characteristic: Linear
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	(The above-listed ratings do not account for the coincidental occurrence of capacitances and inductances. For ratings taking the coincidental occurrence of capacitances and inductances into account, see manual)
Standards, Guidelines and Approvals	
Conformity marking	CE
ATEX Guideline 2014/34/EU	EN 60079-0, -7, -11, -26, -31
EC EMC guideline 2014/30/EU	
Korea Certification	
Marine applications	ABS, BV, DNV, GL, KR, LR, NKK, PRS, RINA
E175199 Ordinary Locations	
TÜV 12 ATEX 106032 X	I M2 (M1) Ex d [ia Ma] I Mb, II 3 (1) G Ex ec [ia Ga] IIC T4 Gc, II 3 (1) D Ex tc [ia Da] IIIC T135 °C Dc
IECEx TUN 12.0039 X	Ex d [ia Ma] I Mb, Ex ec [ia Ga] IIC T4 Gc, Ex tc [ia Da] IIIC T135 °C Dc
TÜV 14.1911 X	Ex d [ia Ma] I Mb, Ex nA [ia Ga] IIC T4 Gc, Ex tc [ia Da] IIIC T135 °C Dc
UL E480271 Hazardous Locations (Zone classified)	Cl I Zn 2 AEx nA [ia Ga] IIC T4 Gc Cl I Zn 2 AEx nA [ia IIIC] IIC T4 Gc Ex nA [ia Ga] IIC T4 Gc X Ex nA [ia IIIC] IIC T4 Gc X
UL E198726 Hazardous Locations (Division classified)	Class I, Div. 2, Group A B C D, T4