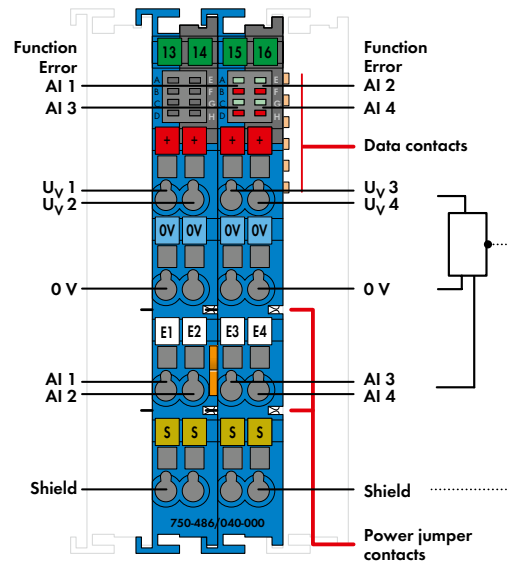


4-Channel Analog Input; 0/4 ... 20 mA; NE43; Intrinsically Safe; Extreme



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 XTR 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 is directly connected to the DIN-rail.

Indicators:

- Green LED (availability ON/OFF)
- Red LED (measurement range overflow/underflow, wire breakage, short circuit)

Description	Item No.	Pack. Unit
4AI 0/4-20mA NE43 Ex i XTR	750-486/040-000	1
Accessories	Item No.	Pack. Unit
Mini-WSB Quick Marking System, plain	248-501	50

Field and system levels are electrically isolated.

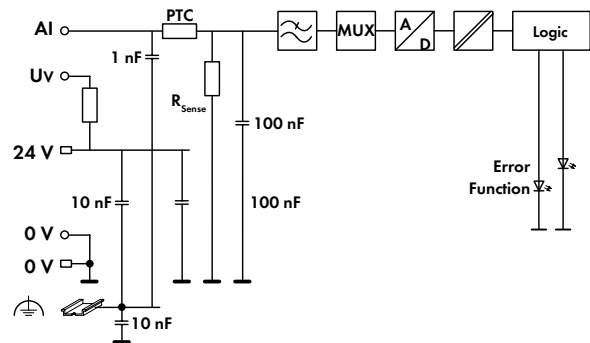
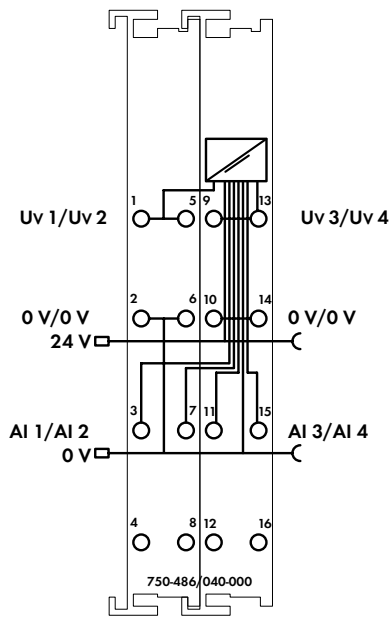
Note: The analog output module must only be operated via 24 VDC Ex i XTR power supply (750-606/040-000)!

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

The device is ideal for operation in harsh environments thanks to:

- Extended temperature range
- Greater immunity to impulse voltages and electromagnetic interference
- Higher vibration and shock resistance

Technical Data	
Number of analog inputs	4
Signal type	0 ... 20 mA; 4 ... 20 mA; 3.6 ... 21 mA
Signal characteristic	Single-ended
Input resistance	< 200 Ω
Resolution	12 bits + sign bit
Crosstalk attenuation	≥ 70 dB
Conversion time	< 10 ms
Measurement/output error (25 °C)	< ± 0.1 % of the largest measurement/output area
Temperature coefficient	< ± 0.01 %/K of the largest measurement/output area
Supply voltage (field)	24 VDC via power jumper contacts (Ex i XTR power supply: U _O = max. 26.8 V)
Transmitter supply	U _V = 15 V at 20 mA
Current consumption (field supply)	19 mA + sensor load
Current consumption (system supply)	45 mA
Power consumption P _{max.}	2.7 W (at 4 x 21 mA signal current)
Power loss P _I	1.5 W (at 4 x 21 mA signal current)
Data width (internal)	4 x 16-bit data; 4 x 8-bit control/status (optional)
Isolation	U _m = 300 VAC system/supply
Rated surge voltage	1 kV; Rated surge voltage between intrinsically safe and non-intrinsically safe circuits: 1.5 kV (EN 60079-11)



Technical Data

Connection technology	CAGE CLAMP®
Conductor range	0.25 ... 2.5 mm ² / 24 ... 14 AWG
Strip length	8 ... 9 mm / 0.33 inch
Dimensions W x H x D	24 x 67.8 x 100 mm
Weight	96.9 g
Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	Max. 95 %, short-term condensation per Class 3K7 / IEC EN 60721-3-3 and E DIN 40046-721-3 (except wind-driven precipitation, water and ice formation)
Operating altitude	Without temperature derating: 0 ... 2000 m; With temperature derating: 2000 ... 5000 m (0.5 K/100 m); Maximum: 5000 m
Vibration resistance	Per IEC 60068-2-6 (acceleration: 5 g), EN 60870-2-2, IEC 60721-3-1, -3
Shock resistance	Per IEC 60068-2-27 (15 g/11 ms/half-sine/1,000 shocks; 25 g/6 ms/1,000 shocks), EN 61373
EMC immunity to interference	EN 61000-6-1, EN 61000-6-2, EN 61131-2 (marine applications), EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
EMC emission of interference	EN 61000-6-3 and EN 61000-6-4, EN 61131-2, EN 60255-26 (marine applications), EN 60870-2-1 and EN 61850-3 (industrial and residential areas)

Explosion protection

Safety-relevant data (circuit)	$U_o = 26.8 \text{ V}$; $I_o = 92.72 \text{ mA}$; $P_o = 621.27 \text{ mW}$; Linear characteristic curve
Reactances Ex ia IIC	$L_o = 1.6 \text{ mH}$; $C_o = 0.082 \mu\text{F}$
Reactances Ex ia IIB	$L_o = 15 \text{ mH}$; $C_o = 0.71 \mu\text{F}$
Reactance Ex ia IIA	$L_o = 25 \text{ mH}$; $C_o = 2.36 \mu\text{F}$
Reactances Ex ia I	$L_o = 36 \text{ mH}$; $C_o = 3.84 \mu\text{F}$
Reactances	Reactances without considering the concurrence of L and C; for reactances that account for the concurrence of L and C, see manual

Guidelines and Approvals

Conformity marking	CE
Ex guideline	EN/IEC 60079-0, -7, -11
Marine applications	ABS, DNV GL, LR, PRS
☉ E175199 Ordinary Locations	
TÜV 17 ATEX 196484 X	☉ II 3 (1) G Ex ec [ia Ga] IIC T4 Gc ☉ II (1) D [Ex ia Da] IIIC ☉ I (M1) [Ex ia Ma] I
IECEx TUN 17.0005X	Ex ec [ia Ga] IIC T4 Gc [Ex ia Da] IIIC [Ex ia Ma] I
☉ UL E198726 Hazardous Locations	Cl I, Div 2, Group A, B, C, D, T4