

2-Channel Analog Input Module 4-20 mA HART

single-ended (S.E.)

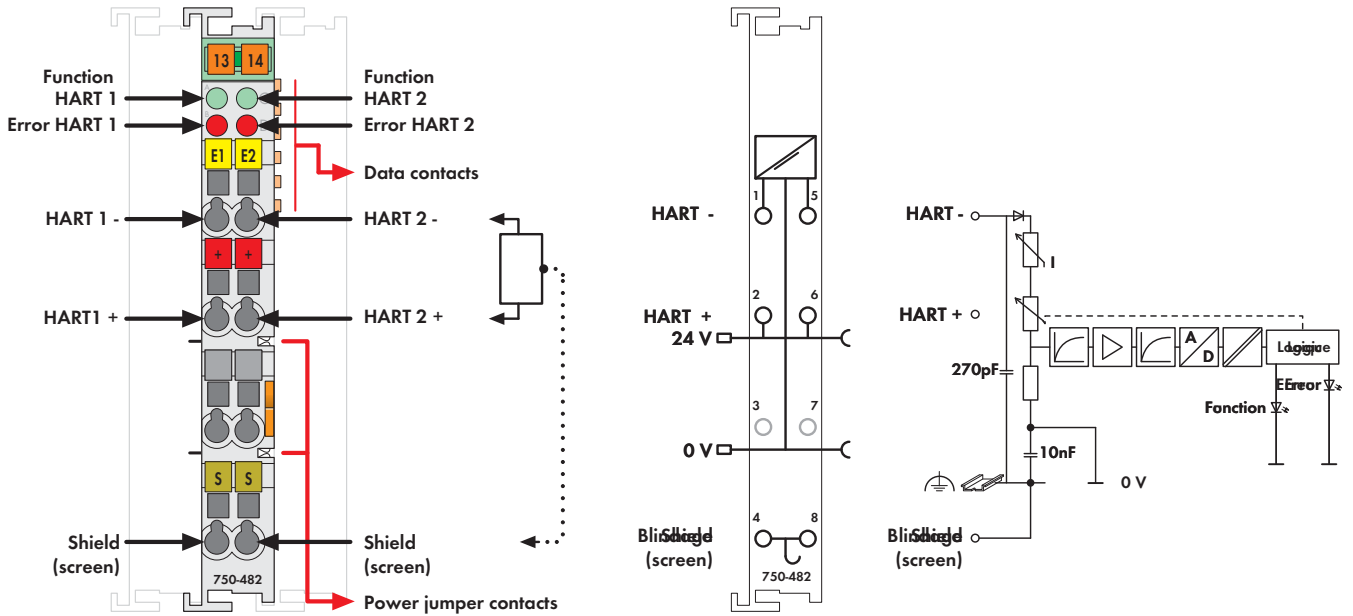


Fig. Series 750 / Technical data see page 28 / Delivery without Mini WSB marker
Series 750 / 753 marking see pages 16 ... 17 / 18 ... 19

The analog input module provides power to the transducers, receives the transmitted analog signals, and with electrical isolation, transmits the signals to the fieldbus.

The 24 V supply for the field is derived from the module's power jumper contacts. The shield (screen) is directly connected to the DIN rail. At approx. 25 mA, the overload protection will switch the measurement input to a high resistance state. Under normal operating conditions it is automatically switched back. This input module can supply the voltage for 2-conductor transducers.

Up to 4 HART secondary variables (PV, SV, TV, QV) per channel can be mapped in the cyclic process image of the coupler or controller (configurable). For the HART communication with connected intelligent HART field devices, the HART protocol can be mapped in the cyclic process image of the coupler or controller (configurable). When using the 750-333 PROFIBUS DP/V1 Coupler and 759-360 PROFIBUS/HART Gateway DTM, FDT routing is possible to the DTM of the connected HART device.

Description	Item no.	Pack. unit
2AI 4-20mA 16 Bit S.E. HART	750-482	1
2AI 4-20mA 16 Bit S.E. HART (without connector)	753-482	1
Accessories		
753 Series connector	753-110	25
Coding elements	753-150	100
Miniature WSB quick marking system, plain	248-501	5
Miniature WSB quick marking system, with marking	see pages 256 ... 257	
Approvals		
Series 750 and 753		
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	applied for	

Technical Data	
No. of inputs	2
Voltage supply	via system voltage DC/DC
Current consumption (internal)	75 mA
Input voltage (max.)	24 V
Input voltage	non-linear, overload protected $V = 1.2 V + 160 \Omega \times I_{mess}$
Signal current	4 mA ... 20 mA
Input resistance	< 240 Ω / 20 mA
Overvoltage protection	30 V, reverse polarity protected
Resolution	12 bits
Conversion time (typ.)	80 ms
Input filter	50 Hz
Noise rejection at sampling frequency	< -100 dB
Noise rejection above sampling	< -40 dB
Measuring error (25 °C)	$\leq 0.1\%$ of upper range value (non-linearity)
Temperature coefficient	< $\pm 0.01\%$ / K of full scale value
Isolation	500 V system/supply
Bit width	2 x 2 bytes data 2 x 2 bytes data + 2n * 4 bytes HART 2 x 2 bytes data + 12 (6) bytes mailbox
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Stripped lengths (750 / 753 Series)	8 ... 9 mm / 0.33 in 9 ... 10 mm / 0.37 in
Width	12 mm
Weight	54 g
EMC CE-Immunity to interference	acc. to EN 50082-2 (1996)
EMC CE-Emission of interference	acc. to EN 50081-1 (1993)
Diagnostics	Wire break, measuring range overflow
HART devices per channel	1 device (single-drop, no multi-drop)
HART modems per channel	1 modem (no multiplex)
HART secondary variables (PV, SV, TV, QV)	max. 4 per channel in cyclic PI