

2-Channel Analog Input Module 0-30 V

differential measurement input

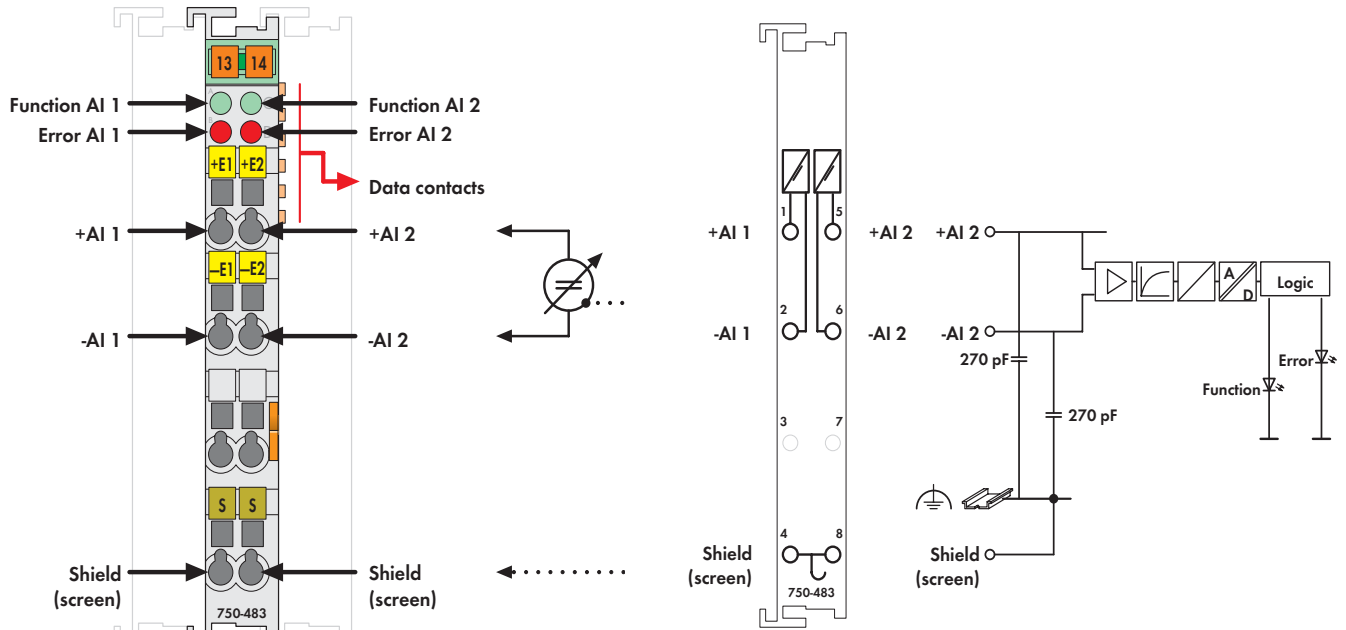


Fig. Series 750 / Technical data see page 41 / Delivery without Mini WSB marker
Series 750 / 753 marking see pages 32 ... 33 / 34 ... 35

The analog input module receives differential signals of values ± 10 V DC or 0 V ... 30 V.

The input signal of each channel is electrically isolated and will be transmitted with a resolution of 14 bits.

The internal system supply (via the data bus contacts) is used for the power supply of the module.

The shield (screen) is directly connected to the DIN rail.

- Measured-value acquisition: time synchronous (both inputs)
- Overrange / measuring range underflow: status byte and LED
- Method of conversion: SAR (Successive Approximation Register)
- Operating mode: continuously sampling (preset)
- Protection: RC circuit

Description	Item no.	Pack. unit
2AI 0-30V DC Diff. Measur. Inp.	750-483	1
2AI 0-30V DC Diff. Measur. Inp. (without connector)	753-483	1
Accessories		
Connectors Series	753-110	25
Coding elements	753-150	100
Miniature WSB Quick marking system		
plain	248-501	5
with marking	see pages 224 ... 225	
Approvals		
Series 750 and 753		
UL 508		
Conformity marking	CE	
Series 750		
Marine applications	see pages 36 ... 39	

Technical Data	
No. of inputs	2, electrically isolated from each other
Voltage supply	via system voltage DC / DC
Current consumption typ (internal)	80 mA
Signal voltage	0 V ... 30 V
Internal resistance	1 MΩ
Input filter	low pass first order, $f_G = 5$ kHz
Resolution of the A/D converter	14 bits
Monotonicity without missing codes	yes
Resolution of measured value	14 bits
Value of a LSB (least significant bit)	1.8 mV
Measuring error (25°C)	$\leq \pm 0.05$ % of the full scale value
Temperature coefficient	$< \pm 0.01$ % / K of the full scale value
Measuring error	≤ 0.4 % over whole temperature scale
	≤ 0.1 % of upper range value (non-linearity)
Crosstalk attenuation	≥ 80 dB
Sampling time of repetition	1 ms
Sampling delay (module)	1 ms
Sampling delay (channel/channel)	≤ 1 μs
Sampling duration	≤ 5 μs
Admissible continuous overload	230 V
Voltage resistance	DC 500 V canal / canal or channel /system
Bit width	2 x 16 bits data
	2 x 8 bits control / status (optional)
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Stripped length series 750 / 753	8 ... 9 mm / 0.33 in; 9 ... 10 mm / 0.37 in
Width	12 mm
Weight	approx. 55 g
EMC CE -Immunity to interference	acc. to EN 50082-2 (1996)
EMC CE -Emission of interference	acc. to EN 50081-1 (1993)
EMC marine appl. - Immunity to interf.	acc. to Germanischer Lloyd (2001)
EMC marine appl. - Emission of interf.	acc. to Germanischer Lloyd (2001)