

2-Channel Analog Input Module 4-20 mA

Isolated differential inputs

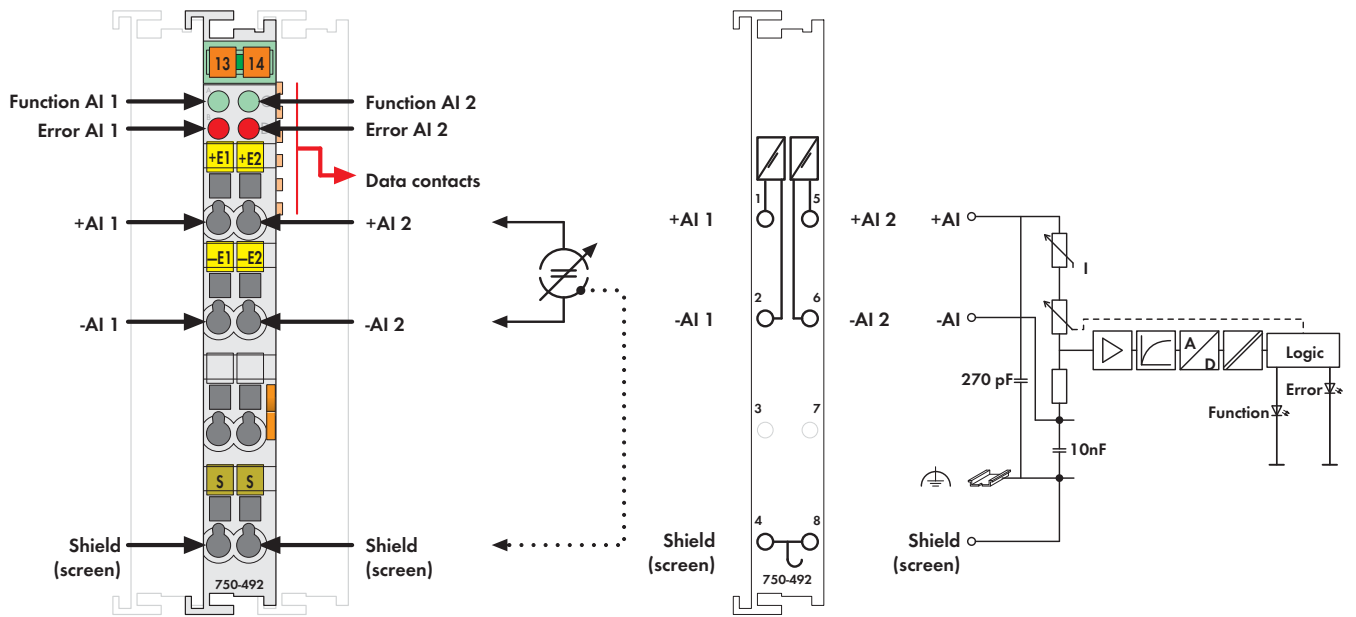


Fig. 750 Series
Delivered without miniature WSB markers

The analog input module receives differential signals of values 4 - 20mA.

The input signal of each channel is electrically isolated and will be transmitted with a resolution of 13 bits.

The 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: non-linear limiting

| Description | Item No. | Pack. Unit |
|---|---|------------|
| 2AI 4-20mA Differential Input | 750-492 | 1 |
| 2AI 4-20mA Differential Input (without connector) | 753-492 | 1 |
| Accessories | | |
| 753 Series Connectors | 753-110 | 25 |
| Coding elements | 753-150 | 100 |
| Miniature WSB Quick marking system | | |
| plain | 248-501 | 5 |
| with marking | see Section 1.1 | |
| Approvals | | |
| Conformity marking | CE | |
| Korea Certification | KC | |
| UL 508 | | |
| ANSI/ISA 12.12.01 | Class I, Div. 2, Grp. ABCD, T4 | |
| TUV 12.1297 X (Brazil) | Ex nA IIC T4 Gc (750-492) | |
| TUV 07 ATEX 554086 X | I M2 Ex d I Mb, II 3 G Ex nA IIC T4 Gc, II 3 D Ex tc IIIC T135°C Dc | |
| IECEX TUN 09.0001 X | Ex d I Mb, Ex nA IIC T4 Gc, Ex tc IIIC T135°C Dc | |

| Technical Data | |
|--|--|
| Number of inputs | 2, electrically isolated from each other |
| Power supply | via system voltage DC/DC |
| Current consumption typ. (internal) | 80 mA |
| Signal current | 4 ... 20 mA |
| Input resistance | < 270 Ω / 20 mA |
| Input filter | low pass first order, f _c = 5 kHz |
| Resolution of the A/D converter | 14 bits |
| Monotonicity without missing codes | yes |
| Resolution of measured value | 13 bits |
| Value of a LSB (least significant bit) | 2.4 μA |
| Measuring error (25 °C) | < ± 0.05 % of the full scale value |
| Temperature coefficient | < ± 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 | 30 V |
| Dielectric strength | 500 V DC channel/channel 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 |
| Strip lengths, 750/753 Series | 8 ... 9 mm / 0.33 in 9 ... 10 mm / 0.37 in |
| Width | 12 mm |
| Weight | 54 g |
| EMC immunity of interference | acc. to EN 61000-6-2 |
| EMC emission of interference | acc. to EN 61000-6-4 |