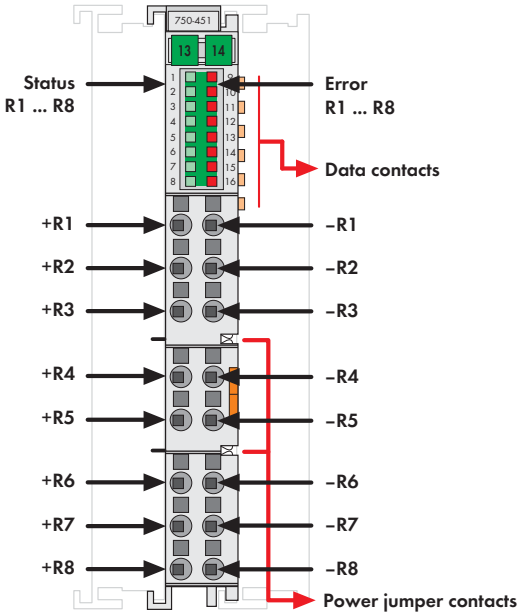
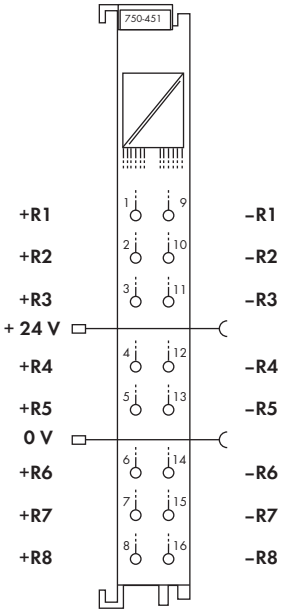
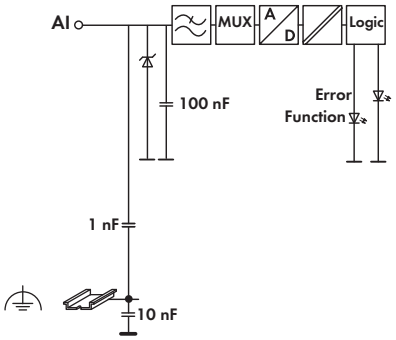
# 8-Channel Analog Input Module for RTDs




Delivered without miniature WSB markers




The input module directly connects to Pt and Ni resistance sensors.
Two-wire sensors can be connected.
The module automatically linearizes the entire temperature range.
A sensor error (short circuit, wire break or out-of-measurement range) is indicated by a red LED. Unused channels can be deactivated.
The module can be configured via WAGO-I/O-CHECK or GSD files, while featuring multiple setting options and high accuracy.

| Description | Item No. | Pack. Unit |
|---|---|---|
| **8 AI RTD, configurable** | **750-451** | 1 |
| **8 AI RTD, configurable/T** | **750-451/025-000** | 1 |
| Extended temperature range: -20 °C ... +60 °C | | |

| Accessories | | Item No. | Pack. Unit |
|---|---|---|---|
| **Miniature WSB Quick marking system** | | | |
| | plain | **248-501** | 5 |
| | with marking | see Section 11 | |
| **Operating tool, with partially insulated shaft, type 1, blade (2.5 x 0.4) mm** | | **210-719** | 50 |

| Approvals | |
|---|---|
| Conformity marking | CE |
| Marine applications | DNV GL |

| Technical Data | |
|---|---|
| Number of inputs | 8 |
| Power supply | via system voltage DC/DC |
| Current consumption typ. (internal) | 110 mA |
| Sensor types | Pt100 (default setting), Pt200, Pt500, Pt1000, Ni100, Ni120, Ni1000 (TK6180 + TK5000), Potentiometer 0 Ohm ... 1.2 kOhm, 0 Ohm ... 5 kOhm |
| Sensor connection | 2-conductor |
| Temperature range | -200 °C ... +850 °C (Pt100, Pt200, Pt500, Pt1000), -60 °C ... +250 °C (Ni100, Ni1000), -80 °C ... +260 °C (Ni120) |
| Resolution | 0.1 °C (over the entire range), 0.01 °C (-50 °C ... 150 °C; Pt1000, Ni1000) |
| Conversion time | per channel: ≤ 100 ms |
| Response time (max.) | 3 s |
| Measuring error (25 °C) | ≤ ±0.6 K (Pt100, Pt200, Pt500, Ni100, Ni120); ≤ ±0.2 K (Pt1000, Ni1000); ≤ ±0.3 Ω at resistance measurement |
| Isolation | 500 V system/supply |
| Measuring current (typ.) | ≤ 350 µA |
| Bit width | 8 x 16 bits data 8 x 8 bits control/status (option) |
| Wire connection | Push-in CAGE CLAMP® |
| Cross sections | solid: 0.08 mm² ... 1.5 mm² / AWG 28 ... 18 fine-stranded: 0.25 mm² ... 1.5 mm² / AWG 22 ... 16 |
| Strip lengths | 8 ... 9 mm / 0.33 in |
| Width | 12 mm |
| Weight | 48.8 g |
| EMC immunity of interference | acc. to EN 61000-6-1, EN 61000-6-2 |
| EMC emission of interference | acc. to EN 61000-6-3 |