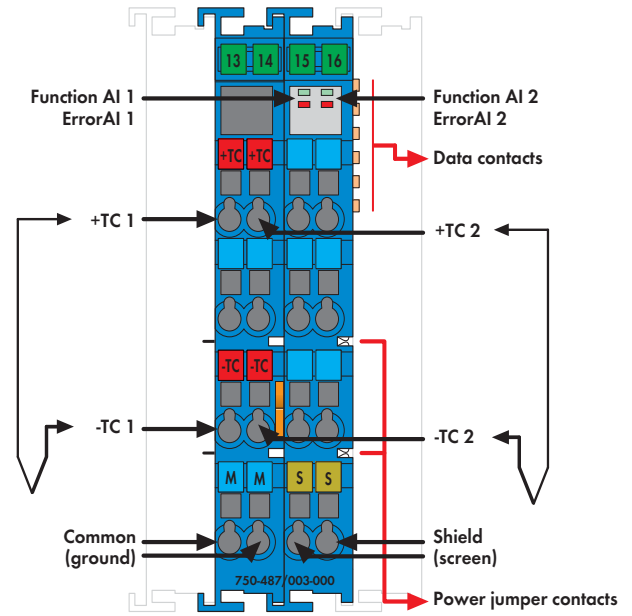


2-Channel Analog Input Module for Thermocouples Ex i



Delivered without miniature WSB markers

The analog input module directly connects two thermocouples operating in hazardous environments of Zones 0 and 1. The WAGO-I/O-SYSTEM 750 must be installed either in Zone 2 or in a non-hazardous area. Internal electrical isolation allows operation of grounded sensors. The module automatically linearizes the entire temperature range. Cold junction compensation mitigates the clamping unit offset voltage over the 0–55 °C operating range.

The 24V supply is derived from the module's power jumper contacts. Field and system levels are electrically isolated. The module mode is parameterized via WAGO-I/O-CHECK 3 software.

LED indicators:

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

Note: The analog input module must only be operated via Ex i 24VDC power supply!

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

Description	Item No.	Pack. Unit
2AI TC Ex i	750-487/003-000	1
Accessories		
Miniature WSB Quick marking system		
plain	248-501	5
with marking	see pages 352 ... 353	

Technical Data	
Number of inputs	2
Current consumption typ. (internal)	50 mA
Voltage via power jumper contacts	Supply via 24 V DC Ex i supply module
Conversion time	≤ 320 ms (both channels)
Measuring error (25 °C)	< ± 6 K (voltage input < ± 2 K; cold junction comp. < ± 4 K) (for type K)
Temperature coefficient	< ± 0.2 K / K of full scale value (type K)
Cold junction compensation	internal; at each pair of modules
Resolution (over entire range)	0.1 °C or 0.01 mV for voltage measurement
Internal resistance	≥ 1MΩ
Measuring range	Thermocouples: Type B: +600 °C ... +1,800 °C Type E: -200 °C ... +1,000 °C Type J: -100 °C ... +1,200 °C Type K: -100 °C ... +1,370 °C* *(default setting) Type L: -100 °C ... +900 °C Type N: -100 °C ... +1,300 °C Type R: 0 °C ... +1,700 °C Type S: -50 °C ... +1,700 °C Type T: -100 °C ... +400 °C Type U: -25 °C ... +600 °C Voltage sensors: MB1: ± 30 mV MB2: ± 60 mV MB3: ± 120 mV
Power consumption P (max.)	0.29 W
Power loss P _v	0.29 W
Isolation	375 V system/supply

