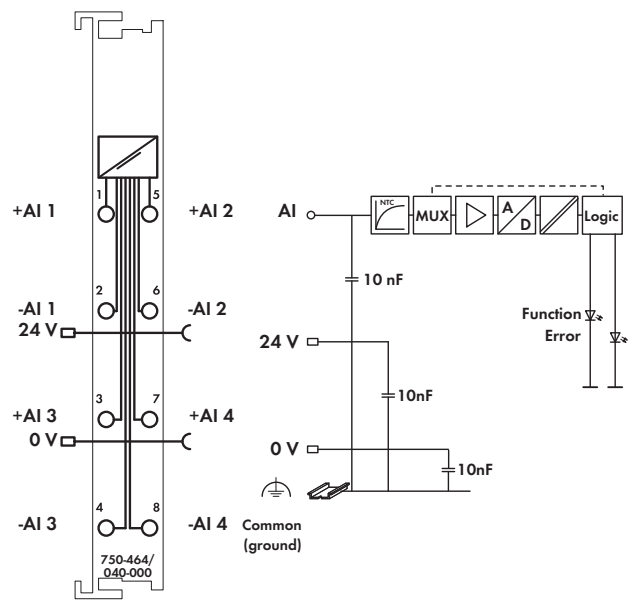
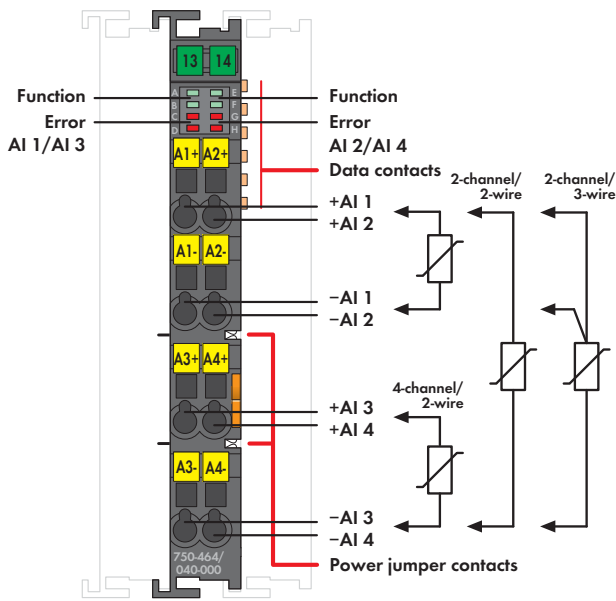


2-/4-Channel Analog Input Module for RTDs

for eXTReme environmental conditions



The input module directly connects to Pt or Ni resistance sensors and potentiometers. It can be operated as a 2-channel (2- and 3-wire technology) or 4-channel (2-wire technology) module. The bus module linearizes the entire temperature range. A sensor error (short circuit, line break or measuring range overflow) is indicated by a red LED. The module can be configured via WAGO-I/O-CHECK or GSD files. The module features multiple setting options and high accuracy.

The module is ideally suited for operation in harsh environmental conditions:

- strongly extended temperature range
- higher dielectric strength and EMC resistance
- higher vibration and shock resistance

Description	Item No.	Pack. Unit
2/4 AI RTD configurable /XTR	750-464/040-000	1
Accessories		
Miniature WSB Quick marking system		
plain	248-501	5
with marking	see Section 11	
Approvals		
Conformity marking	CE	
Korea Certification	KCC	
Marine applications	GL, LR	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
TÜV 17 ATEX 193969 X	II 3G Ex ec IIC T4 Gc	
IECEx TUN 16.0046 X	Ex ec IIC T4 Gc	
Technical Data		
Wire connection	CAGE CLAMP®	
Cross sections	0.25 mm ² ... 2.5 mm ² / AWG 24 ... 14	
Strip lengths	8 ... 9 mm / 0.33 in	
Dimensions (mm) W x H x L	12 x 62 x 100; Height from upper-edge of DIN 35 rail	
Weight	47.3 g	
Operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	Max. 95 % short-term condensation per Class 3K7/ IEC EN 60721-3-3 and E DIN 40046-721-3 (except wind-driven precipitation, water and ice formation)	
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m	
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994	
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5	

Technical Data	
Number of inputs	2 / 4 (default setting)
Sensor types	Pt100 (default), Pt200, Pt500, Pt1000 (IEC 751), Ni100, Ni1000 (DIN 43760), Ni120 (Minco), Ni1000 (TK 5000), 2-channel operation: potentiometer, resistance measurement 10 Ω ... 5000 Ω, 10 Ω ... 1200 Ω
Sensor connection	2-conductor (default setting), 3-conductor (2-channel operation)
Measuring current (typ.)	≤ 350 µA per measurement circuit
Measurement repetition rate (standard)	1.1 s
Measurement repetition rate (2-channel/2-conductor)	0.63 s
Response time (max.)	4 s
Resolution	16 bits (0.1 °C)
Conversion time	≤ 320 ms
Measuring error (25 °C)	≤ 1 K in the entire temp. range, ≤ 0.5 K in the restricted temp. range (-30 °C ... +120 °C)
Accuracy (+25 °C)	≤ ± 0.2% of full scale value; typ.: ≤ ± 0.1% of full scale value
Temperature coefficient	≤ 20 ppm/K; typ. ≤ 15 ppm/K
Current consumption typ. (internal)	50 mA
Voltage via power jumper contacts	24 VDC
under laboratory conditions +15 °C ... +35 °C	18 V ... 31.2 V (17.4 V ... 31.2 V) ¹⁾
for -40 °C ... +55 °C	18 V ... 28.8 V (17.4 V ... 28.8 V) ¹⁾
for +55 °C ... +70 °C	18 V ... 26.4 V (17.4 V ... 26.4 V) ¹⁾
	¹⁾ including residual ripple of 15 %
Current via power jumper contacts (max.)	10 A
Rated surge voltage	1 kV
Bit width	4 (2) x 16 bits data 4 (2) x 8 bits control/status (option)
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373