2-Channel Analog Input Module for RTDs

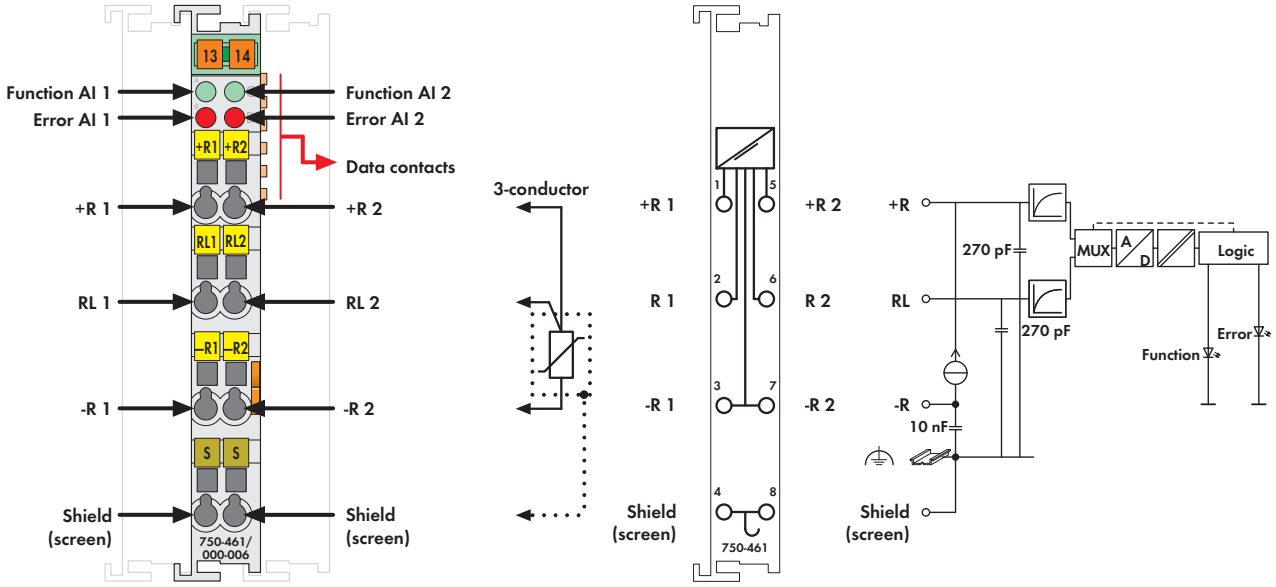

Fig. Series 750 / Technical data see page 28 / Delivery without Mini WSB marker
Series 750 / 753 marking see pages 16 ... 17 / 18 ... 19

The RTD (resistive temperature device) input module allows the direct connection of Pt or Ni resistance sensors.
The connection of 2- or 3-conductor sensors is possible.
The module linearizes the entire temperature range automatically.
A sensor error is indicated by a red LED.
A green LED indicates readiness for operation and trouble-free communication with the buscoupler.
The shield (screen) is directly connected to the DIN rail.

All the listed types of sensors are supported by the configurable variation.
Set-up using the WAGO-I/O-Check 2 software.

Other variations are available upon request:
Pt 100; Pt 200; Pt 500; Pt 1000; temperature range -200 °C ... + 850 °C;
Ni 100; Ni 100; temperature range -60 °C ... +250 °C and resistance measuring

Differing technical data for 750-461/020-000:
- Current consumption max (internal): 65 mA
- Sensor types: NTC 20 kOhm
- Temperature range: -30 °C ... +130 °C
- Measuring error: 0.5 K ... 3.0 K (dependent on temperature)
- Temperature coefficient: < +/- 0.002 %/K of full scale value
- Measured current typ.: 0.05 mA at 25 °C

Description	Item no.	Pack. unit
2AI Pt 100/RTD	**750-461**	10[1]
2AI Pt 1000/RTD	**750-461/000-003**	1
2AI Pt 100/RTD S5 [2]	**750-461/000-200**	1
2AI Pt 100/free configurable	**750-461/003-000**	1
2AI Ni 100/RTD	**750-461/000-004**	1
2AI Ni 1000 TK6180/ RTD	**750-461/000-005**	1
2AI Ni 1000 TK5000/ RT	**750-461/000-009**	1
2AI Resistance Measur. 10R-1k2	**750-461/000-002**	1
2AI Resistance Measur. 10R-5k0	**750-461/000-007**	1
2AI NTC 20k	**750-461/020-000**	1
Differing technical data see text		
2AI Pt 100/RTD (without connector)	**753-461**	10[1]
[1] Also available individually		
[2] Data format for S5 control with FB 251		

Accessories		Item no.	Pack. unit
	753 Series connector	**753-110**	25
	Coding elements	**753-150**	100
	**Miniature WSB quick marking system,**		
	plain	**248-501**	5
	with marking	see pages 256 ... 257	

Approvals

Series 750 and 753	
Conformity marking	CE
UL 508	
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4
Series 750	
EN 60079-15	I M2 / II 3 GD Ex nA IIC T4
Marine applications	see "Approvals Overview" in section 1

Technical Data

No. of inputs	2
Voltage supply	via system voltage DC/DC
Current consumption typ. (internal)	80 mA
Sensor types	Pt 100 (basic variation), optional variations available for Pt 200, Pt 500, Pt 1000, Ni 100, Ni 120, Ni 1000, resistance measuring
Sensor connection	3-wire connection (factory preset) or 2-wire
Temperature range	-200 °C ... + 850 °C (Pt)
	-60 °C ... +250 °C (Ni)
Resolution (over whole range)	0.1 °C
Conversion time	320 ms (per channel)
Response time (max.)	4 s
Measuring error (25 °C)	< ± 0.2 % of the full scale value
Temperature coefficient	< ± 0.01 % / K of the full scale value
Isolation	500 V system/supply
Measuring current (typ.)	0.5 mA
Bit width	2 x 16 bits data
	2 x 8 bits control/status (optional)
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Stripped lengths (750 / 753 Series)	8 ... 9 mm / 0.33 in
	9 ... 10 mm / 0.37 in
Width	12 mm
Weight	52.5 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 applications -	
Immunity to interference	acc. to Germanischer Lloyd (2003)
EMC marine applications -	
Emission of interference	acc. to Germanischer Lloyd (2003)

WAGO Kontakttechnik GmbH & Co. KG
Postfach 2880 • D-32385 Minden Tel.: +49(0)571/887-0 E-Mail: info@wago.com
Hansastr. 27 • D-32423 Minden Fax: +49(0)571/887-169 www.wago.com