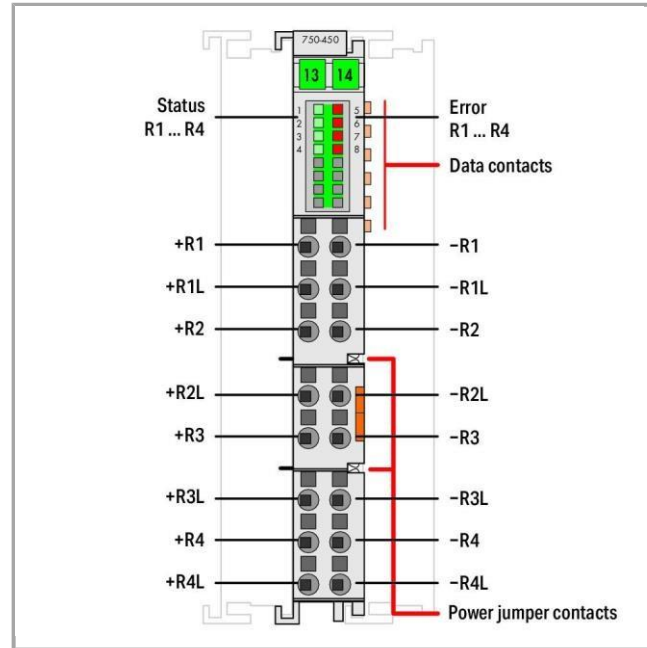
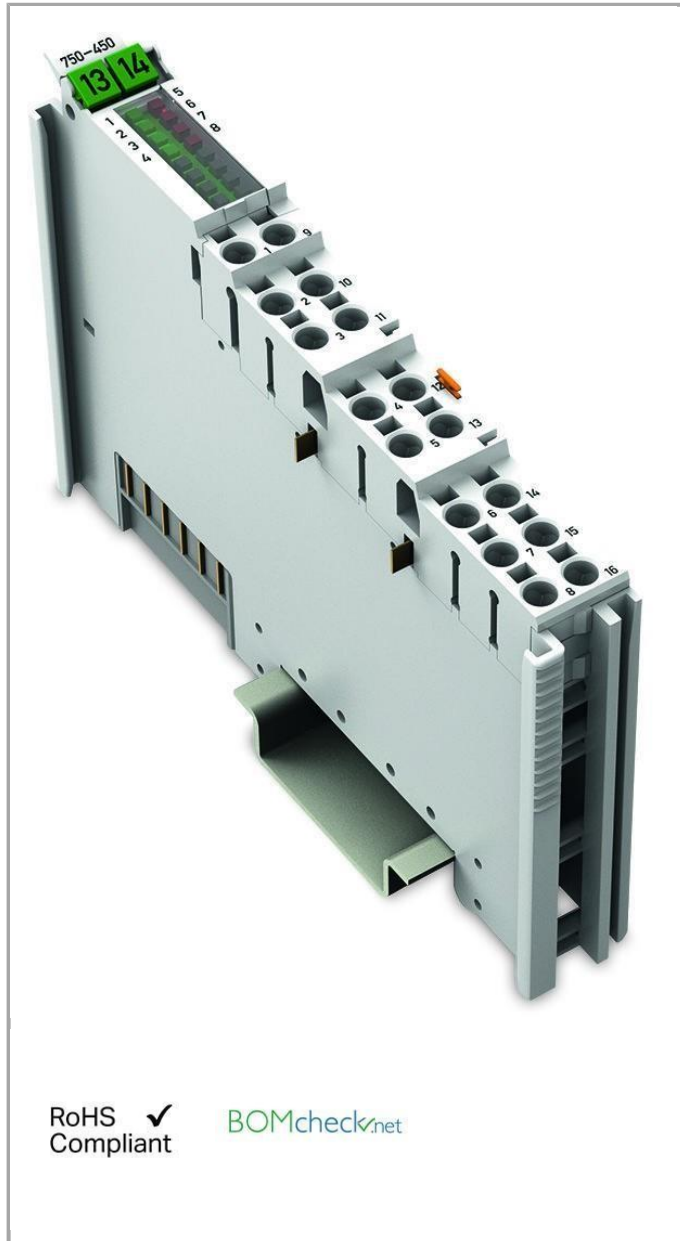


Data sheet | Item number: w750-450

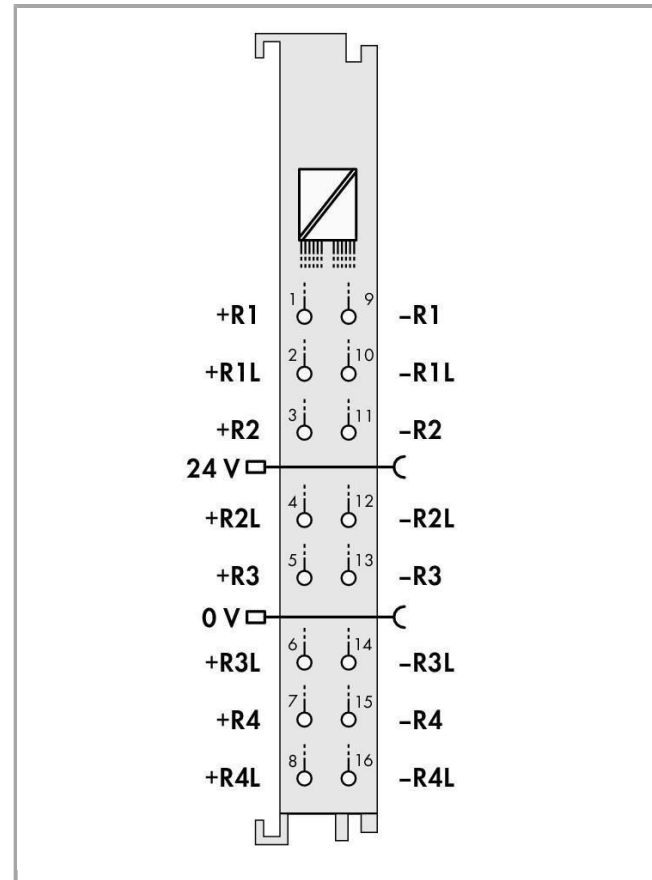
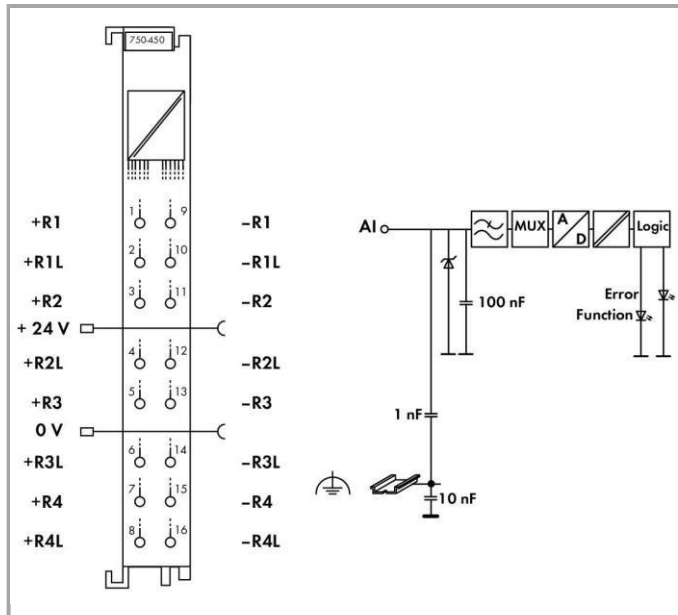
4-channel analog input - resistance; Resistance measurement; Adjustable

<https://www.domat-int.com/en/data-sheets>



RoHS 
Compliant

 BOMcheck.net



Item description

This input module directly connects to Pt or Ni resistance sensors and potentiometers.

The connection of 2-, 3- or 4-conductor resistance sensors is possible. Potentiometers are connected with 3-wire technology. 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. It features multiple setting options and high accuracy.

Data

Technical Data

Number of analog inputs	4
Total number of channels (module)	4
Type of signal	Resistance measurement Potentiometer positions
Configurable type of signal	yes
Sensor connection	4 × (2-conductor, 3-conductor, 4-conductor)
Bit width	4 × 16-bit data; 4 × 8-bit control/status (optional)
Resolution (over entire range)	0.1 °C (over the entire range); 0.01 °C (-50 °C ... 150 °C; Pt1000, Ni1000)

Conversion time (typ. ≤)	100 ms
Conversion time	Per channel: ≤ 100 ms (2-/4-wire connection), ≤ 200 ms (3-wire connection)
Response time (max.)	3 s
Sensor types	Pt100 (default setting), Pt200, Pt500, Pt1000, Ni100, Ni120, Ni1000 (TK6180 + TK5000), Potentiometer 0 Ohm ... 1.2 kOhm, 0 Ohm ... 5 kOhm
Temperature range	-200 ... +850 °C (Pt100, Pt200, Pt500, Pt1000), -60 ... +250 °C (Ni100, Ni1000), -80 ... +260 °C (Ni120)
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	85 mA
System and sensor supply voltage	
Field supply voltage	DC 24 V (-25 ... +30 %); via power contacts (connection via blade contacts, communication via spring contacts)
Isolation	500 V system/field
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

Connection data

Connection technology: Inputs	16 × Push-in CAGE CLAMP®
Connection type (1)	Inputs
Solid conductor	0.08 ... 1.5 mm ² / 28 ... 16 AWG
Fine-stranded conductor	0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

Geometrical Data

Width	12 mm / 0.472 inch
Height	69 mm / 2.717 inch
Height from upper-edge of DIN-35 rail	61.8 mm / 2.433 inch
Depth	100 mm / 3.937 inch

Mechanical data

Type of mounting	DIN-35 rail
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Material Data

Housing material	Polycarbonate, polyamide 6.6
Weight	49 g
Conformity marking	CE

Environmental Requirements

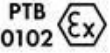

Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-1, EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Product Group	15 (Remote I/O)
Country of origin	DE
GTIN	4017332448635

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_14_ATEX_148929_X
	ATEX TUEV Nord Cert GmbH	IEC 60079-0	IECEx_TUN_14.0035_X



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Data sheet | Item number: w750-450
<https://www.domat-int.com/en/data-sheets>




UL
Underwriters Laboratories Inc. (HAZARDOUS
LOCATIONS)




ANSI/ISA 12.12.01

E198726 Sec.1


Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REMW43AIM750

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19-HG1821926
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194
	PRS Polski Rejestr Statków	-	TE/2236/880590/19

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Subject to changes.

Domat control system

WAGO Kontakttechnik GmbH & Co. KG (manufacturer)

Do you have any questions about our products?

We are always happy to take your call at +420 461 100 666.