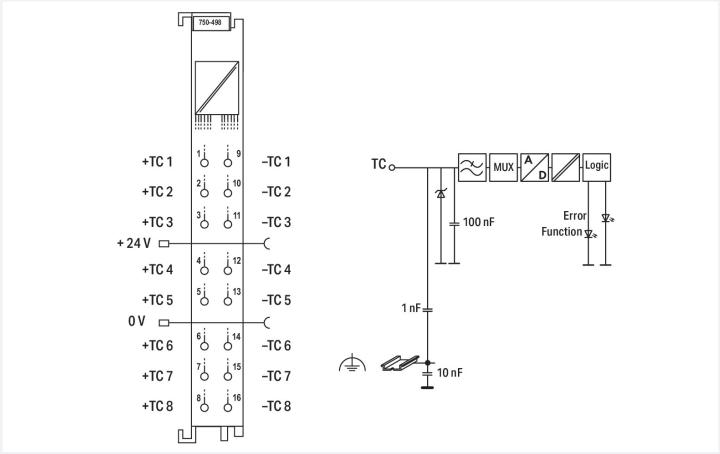
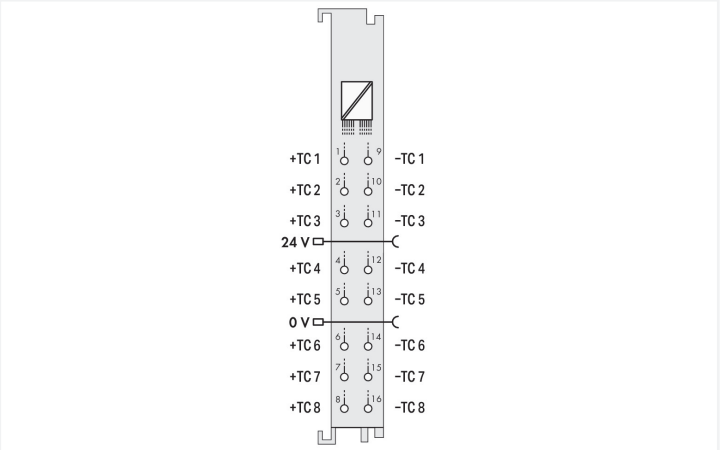
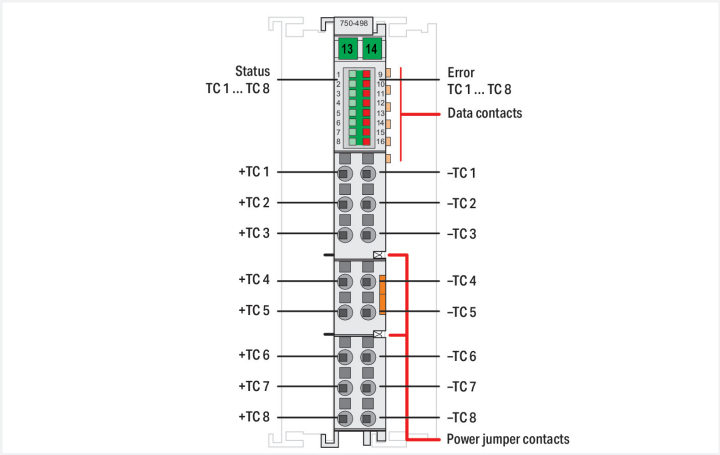
Data Sheet | Item Number: 750-498

8-channel analog input; Thermocouple; Adjustable

https://www.wago.com/750-498







The 750-498 I/O Module measures either voltages (mV) in the field or analyzes thermocouples.
Depending on the sensor selection for the respective I/O module, the voltage value is output directly or converted into the respective temperature value.
Based on the measured values supplied by the thermocouple and the cold junction temperature, the I/O module determines the corresponding temperature at the measurement point of the thermocouple used.
The I/O module has eight input channels, providing a direct connection from thermocouples to 2-wire sensors.
The field level and the system level are electrically isolated from one another.

Technical data

Number of analog inputs	8
Total number of channels (module)	8
Signal type	Thermocouple Low voltages
Signal type (configurable)	Yes
Sensor connection	8 x (2-wire)
Data width	8 x 16-bit data; 8 x 8-bit control/status (optional)
Resolution (over entire range)	0.1 °C
Conversion time	≤100 ms (per channel), activated notch filter; ≤50 ms (per channel), deactivated notch filter
Measurement error (25 °C)	with cold junction compensation: ≤ ±1 K (type E, N, K, T, J) at ≥-50 °C; ≤ ±2 K (type S, R, C) at ≥100 °C; ≤ ±3 K (type B) at ≥350 °C;(Please find additional measurement error information in the manual.)
Temperature error (max.) of the upper-range value	0.05 %/K
Temperature coefficient	Type K: ±0.05 K/K of the upper-range value; Voltage measurements: ±50 ppm/K of the upper-range value
Sensor types	Type K, J, B, E, N, R, S, T, C; Voltage measurement: ±30 mV; ±60 mV; ±120 mV; ±240 mV
Cold junction compensation	Module-internal based on a cold junction temperature measurement

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Technical data

Configuration options	WAGO-I/O-*CHECK* CODESYS Library ***e!****COCKPIT*
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	100 mA
Supply voltage (field)	24 VDC (-25 … +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Isolation	500 V system/field
Indicators	LED (1-8) green: Status TC 1 … TC 8; LED (9-16) red: Error TC 1 … TC 8
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

Connection data

Connection technology: inputs/outputs	16 x Push-in CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.08 … 1.5 mm² / 28 … 16 AWG
Fine-stranded conductor	0.25 … 1.5 mm² / 22 … 16 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inches

Physical data

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

Mechanical data

Mounting type	DIN-35 rail

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	0.837 MJ
Weight	48.9 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 … +55 °C
Ambient temperature (storage)	-25 … +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 … 2000 m / 0 … 6562 ft
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2, EN 61131-2
EMC emission of interference	per EN 61000-6-3, EN 61131-2
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

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Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs-stelle	TP TC 020/2011	EAC RU C-DE.AM02.B.00087/19
UL Underwriters Laboratories Inc. (ORDINARY LOCATI-ONS)	-	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor-mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
BSH Bundesamt fuer See-schifffahrt und Hydrogra-phie	-	1104
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	66711/A0
DNV GL Det Norske Veritas, Ger-manischer Lloyd	DNVGL-CG-339,Nov.2016	TAA00002K2

Approvals for hazardous areas

Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA-TIONS)	UL 121201	E198726 Sec.1

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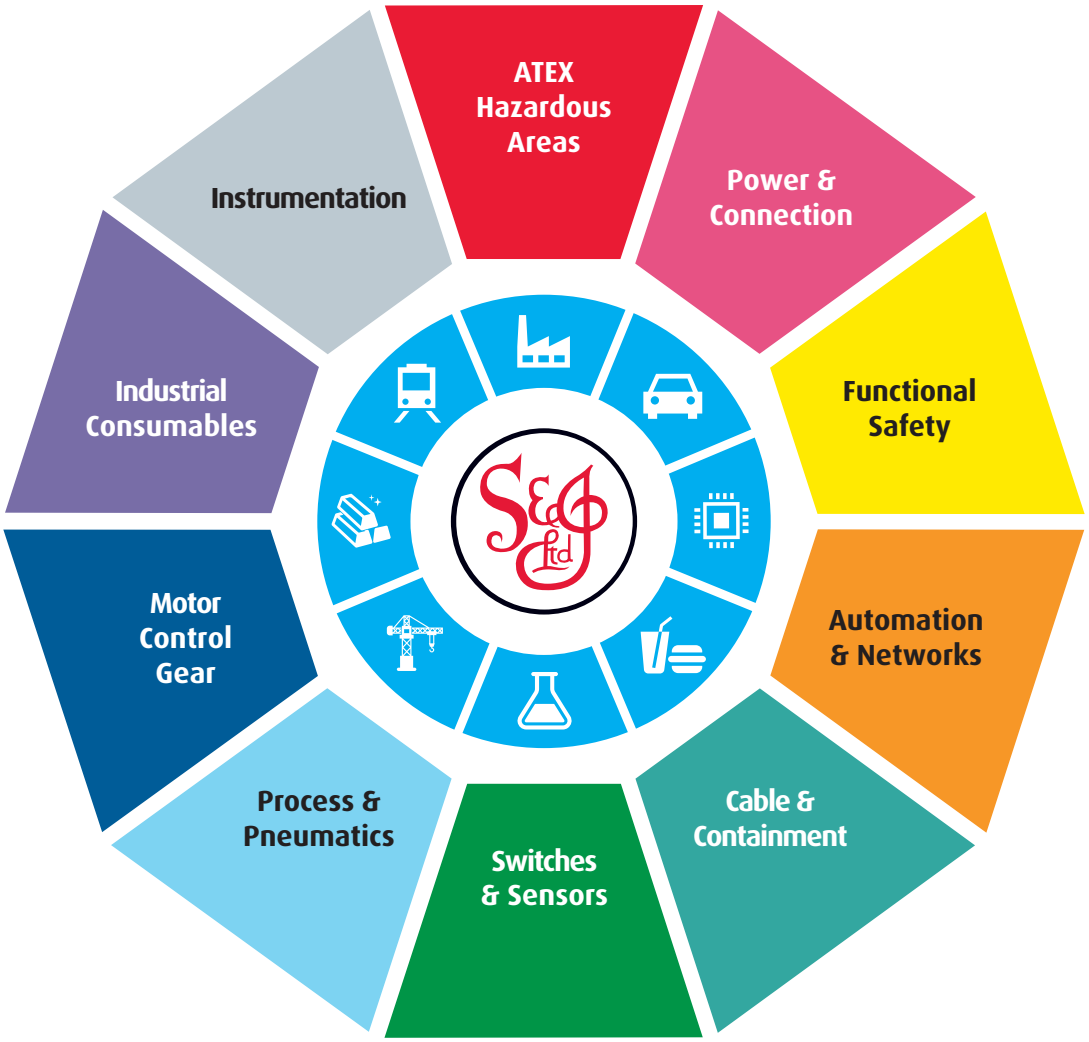

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