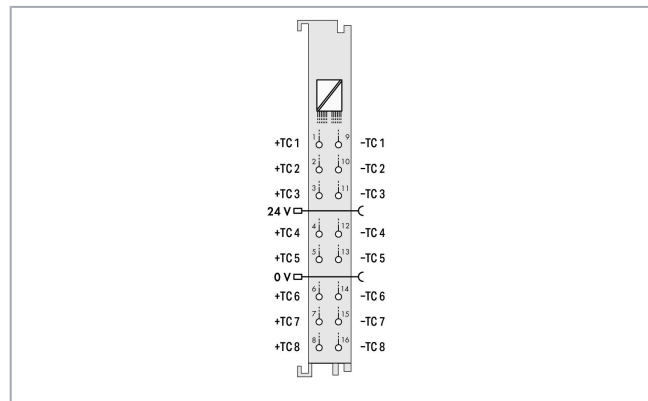
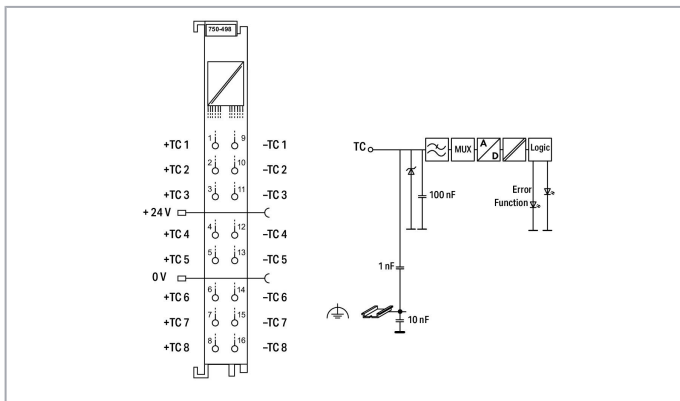
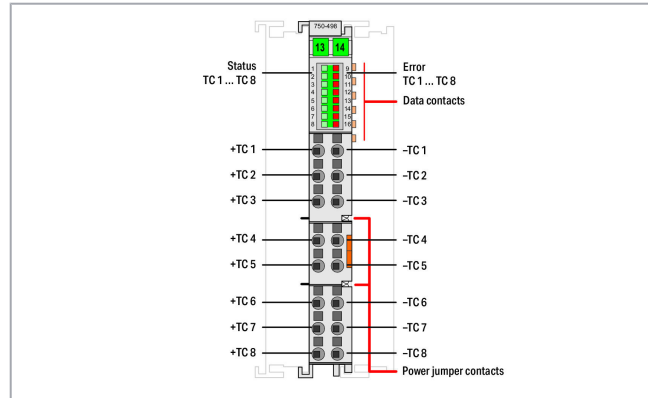
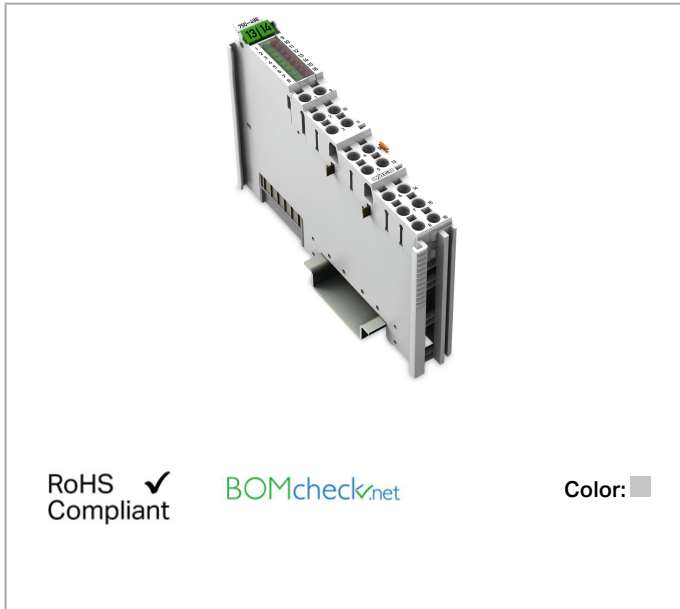


Data sheet | Item number: 750-498

8-channel analog input; Thermocouple; Adjustable; light gray

www.wago.com/750-498



Item description

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.

Subject to changes. Please also observe the further product documentation!

WAGO Corporation
Germantown, WI 53022
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Data

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 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
Supply voltage (system)	DC 5 V; via data contacts
Power consumption (5 V system supply)	100 mA
Supply voltage (field)	DC 24 V (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Isolation	500 V system/field
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 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

Physical data

Width	12 mm / 0.472 inch
Height	100 mm / 3.937 inch

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Depth	69 mm / 2.717 inch
Depth from upper edge of DIN-rail	61.8 mm / 2.433 inch

Mechanical data

Mounting type	DIN-35 rail
---------------	-------------

Material data

Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Weight	48.9 g
Conformity marking	CE

Environmental requirements

Surrounding air temperature (operation)	0 ... 55 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
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 pollutant concentration H ₂ S at a relative humidity < 75%	10 ppm
Permissible pollutant concentration SO ₂ at a relative humidity < 75%	25 ppm

Commercial data

Packaging type	BOX
Country of origin	DE
GTIN	4055143944380
Customs tariff number	85389099990

Approvals / Certificates


Ex-Approvals

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Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Ship Approvals








Logo	Approval	Additional Approval Text	Certificate name
	DNV GL Det Norske Veritas, Germanischer Lloyd	DNVGL-CG-339,Nov.2016	TAA00002K2

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199 Sec11

Compatible products

shield connection

	Item no.: 790-108 Shield clamping saddle; 11 mm wide; 0-8 mm diameter conductors	www.wago.com/790-108
	Item no.: 790-116 Shield clamping saddle; 19 mm wide; 7-16 mm diameter conductors	www.wago.com/790-116
	Item no.: 790-124 Shield clamping saddle; 27 mm wide; 6-24 mm diameter conductors	www.wago.com/790-124
	Item no.: 790-140 Shield clamping saddle; 43 mm wide; 22-40 mm diameter conductors	www.wago.com/790-140
	Item no.: 790-208 Shield clamping saddle; 12.4 mm wide; 3-8 mm diameter conductors	www.wago.com/790-208
	Item no.: 790-216 Shield clamping saddle; 21.8 mm wide; 6-16 mm diameter conductors	www.wago.com/790-216
	Item no.: 790-220 Shield clamping saddle; 30 mm wide; 6-20 mm diameter	www.wago.com/790-220

tools

Subject to changes. Please also observe the further product documentation!

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Item no.: 210-719

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

www.wago.com/210-719

system box



Item no.: 850-804

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip

www.wago.com/850-804



Item no.: 850-804/000-001

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip

www.wago.com/850-804/000-001



Item no.: 850-805

IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip

www.wago.com/850-805



Item no.: 850-814/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

www.wago.com/850-814/002-000



Item no.: 850-815/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

www.wago.com/850-815/002-000



Item no.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

www.wago.com/850-816/002-000



Item no.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

www.wago.com/850-817/002-000



Item no.: 850-825

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

www.wago.com/850-825



Item no.: 850-826

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

www.wago.com/850-826



Item no.: 850-826/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

www.wago.com/850-826/002-000



Item no.: 850-827

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

www.wago.com/850-827



Item no.: 850-827/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

www.wago.com/850-827/002-000



















Item no.: 850-828

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

www.wago.com/850-828














Item no.: 850-828/002-000

Subject to changes. Please also observe the further product documentation!

	IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	www.wago.com/850-828/002-000
	Item no.: 850-834 IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20	www.wago.com/850-834
	Item no.: 850-835 IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-835
	Item no.: 850-836 IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-836
Carrier rail		
	Item no.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored	www.wago.com/210-112
	Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	www.wago.com/210-113
	Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	www.wago.com/210-114
	Item no.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored	www.wago.com/210-115
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	www.wago.com/210-118
	Item no.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	www.wago.com/210-196
	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored	www.wago.com/210-197
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	www.wago.com/210-198
	Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	www.wago.com/210-504
	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored	www.wago.com/210-505
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	www.wago.com/210-506
	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	www.wago.com/210-508

Subject to changes. Please also observe the further product documentation!

Marking accessories

	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-145
	Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	www.wago.com/2009-145/000-002
	Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	www.wago.com/2009-145/000-005
	Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	www.wago.com/2009-145/000-006
	Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	www.wago.com/2009-145/000-007
	Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange	www.wago.com/2009-145/000-012
	Item no.: 2009-145/000-023 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	www.wago.com/2009-145/000-023
	Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	www.wago.com/2009-145/000-024
	Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card	www.wago.com/248-501
	Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow	www.wago.com/248-501/000-002
	Item no.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red	www.wago.com/248-501/000-005
	Item no.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue	www.wago.com/248-501/000-006
	Item no.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray	www.wago.com/248-501/000-007

Subject to changes. Please also observe the further product documentation!



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

www.wago.com/248-501/000-012



Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

www.wago.com/248-501/000-017



Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

www.wago.com/248-501/000-023



Item no.: 248-501/000-024
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

www.wago.com/248-501/000-024



Item no.: 750-103
Group marker carrier; transparent

www.wago.com/750-103



Item no.: 750-107
Group marker carrier; transparent

www.wago.com/750-107

Downloads

Documentation

Bid Text

750-498	doc 31.2 kB	Download
750-498	xml 6.4 kB	Download

System Description

750/753 Series I/O-System – General Product Information	pdf 1.7 MB	Download
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 780.2 kB	Download
Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0 pdf 1.0 MB	Download

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0 pdf 265.8 kB	Download
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Subject to changes. Please also observe the further product documentation!



Installation Notes

Product family

Couplers & I/O modules:

[Show all products from the family](#)

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