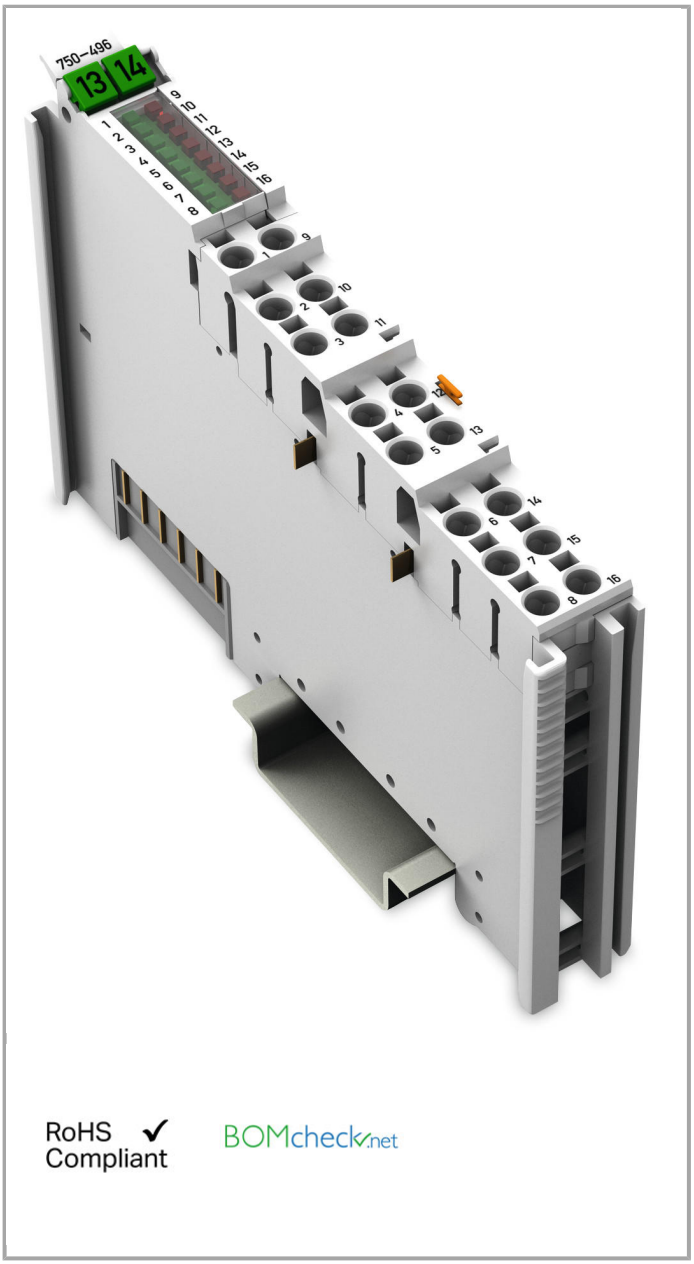
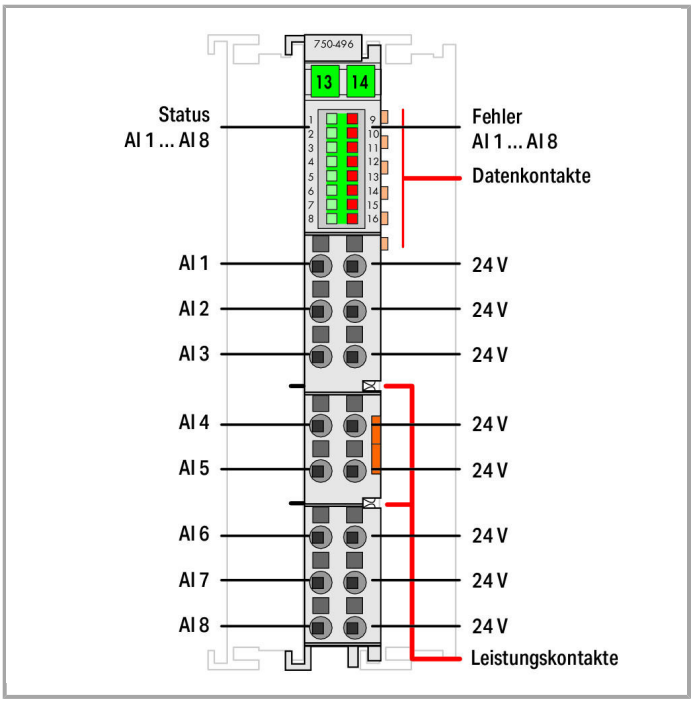
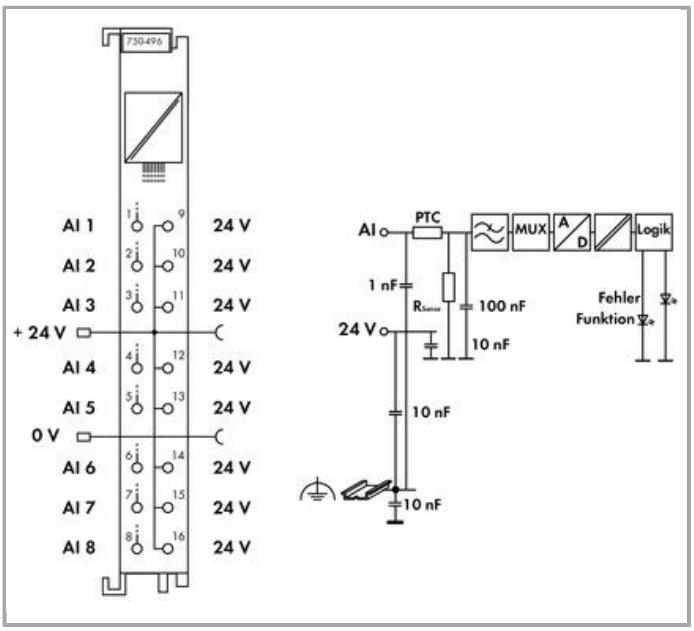
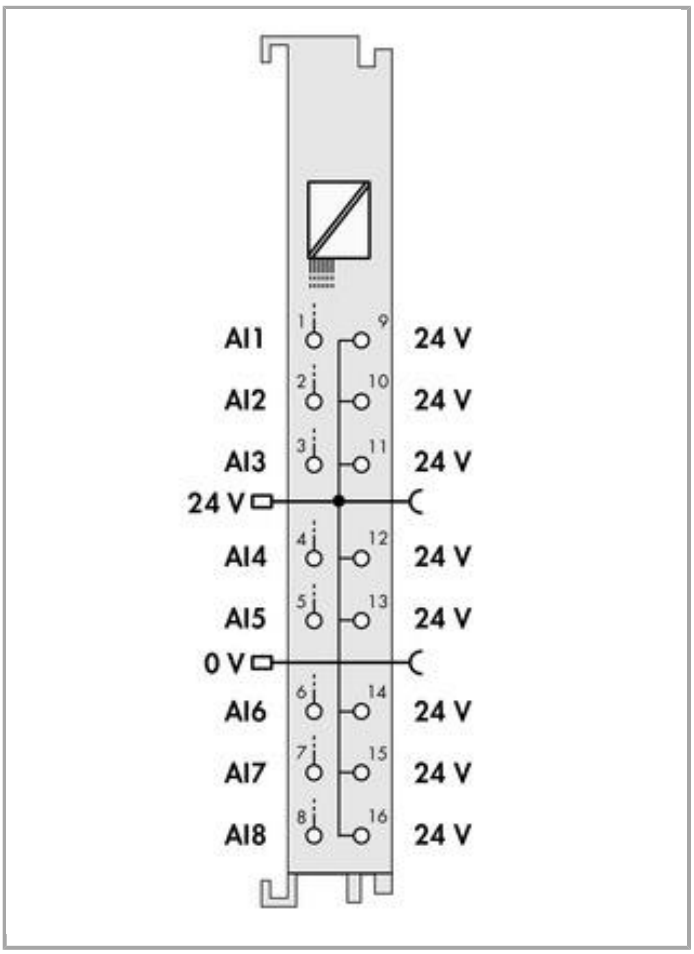
8-channel analog input; 0/4 … 20 mA; Single-ended

www.wago.com/750-496









Item description

This analog input module processes standard 0–20 mA, 4–20 mA and 3.6–21 mA signals (Namur NE43).

The module provides a 24 V power supply, providing a direct connection to 2-wire sensors.

The input signal is electrically isolated and transmitted with a resolution of 12 bits.

Wire break, short circuit and out-of-measurement range are 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 an extremely compact design and low measurement errors.

Data

Technical Data

Number of analog inputs	8
Total number of channels (module)	8
Type of signal	Current
Type of signal current	DC 0 … 20 mA; DC 4 … 20 mA; DC 3.6 … 21 mA

Configurable type of signal	yes
Sensor connection	8 x (2-conductor)
Input voltage (max.)	31.2 V
Resolution [bit]	12 Bit
Input resistance max.	220 Ω
Bit width	8 x 16-bit data; 8 x 8-bit control/status (optional)
Conversion time (typ. ≤)	10 ms
Messfehler, Bezugstemperatur	25 °C
Messfehler, Abweichung max. vom Messbereichsendwert	0.1 %
Temperaturfehler max. vom Messbereichsendwert	0.01 %/K
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	69 mA
Field supply voltage	DC 24 V (-25 … 30 %); über Leistungskontakte (Einspeisung über Messerkontakt; Weiterleitung über Federkontakt)
Isolation	500 V system/supply
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

Connection data

Connection technology: In-/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 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

Material Data

Housing material	Polycarbonate, polyamide 6.6
Fire load	0.338 MJ
Weight	62 g
Conformity marking	CE

Environmental Requirements

Surrounding air (operating) temperature	0 … 55 °C
Surrounding air (storage) temperature	-40 … 85 °C
Degree of protection	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 61000-6-2
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_2S contaminant concentration at a relative humidity < 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity < 75 %	25 ppm

Commercial data

Packaging type	BOX
Country of origin	DE
GTIN	4055143350365
Customs Tariff No.	85389099990

Approvals / Certificates

Ex-Approvals

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

Country specific Approvals

Logo	Approval	Certificate name
	KC National Radio Research Agency	MSIP-REM-W43-AIM750
	KC National Radio Research Agency	MSIP-REM-W43-AIM750

Ship Approvals

Logo	Approval	Certificate name
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAA0000194
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAA0000194
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAA00000Y7 Rev.1
	PRS Polski Rejestr Statków	TE/2210/880590/18

UL-Approvals

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

Compatible products

tools

	Item no.: 210-719 Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm	www.wago.com/210-719

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	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	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	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	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	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	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	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	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	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	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	www.wago.com/210-508

shield connection

	**Item no.: 790-108** Shield clamping saddle; 11 mm wide; diameter of compatible conductor	www.wago.com/790-108
	**Item no.: 790-116** Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 … 16 mm	www.wago.com/790-116
	**Item no.: 790-124** Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 … 24 mm	www.wago.com/790-124
	**Item no.: 790-140** Shield clamping saddle; diameter of compatible conductor	www.wago.com/790-140
	**Item no.: 790-208** Shield clamping saddle; 12.4 mm wide; 3 … 8 mm	www.wago.com/790-208
	**Item no.: 790-216** Shield clamping saddle; 21.8 mm wide; 6 … 16 mm	www.wago.com/790-216
	**Item no.: 790-220** Shield clamping saddle; 30 mm wide; 6 … 20 mm	www.wago.com/790-220

Marking accessories

	**Item no.: 2009-145** Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145
	**Item no.: 2009-145/000-002** Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-002

	Item no.: 2009-145/000-005 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-005
	Item no.: 2009-145/000-006 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-006
	Item no.: 2009-145/000-007 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-007
	Item no.: 2009-145/000-012 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-012
	Item no.: 2009-145/000-023 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-145/000-023
	Item no.: 2009-145/000-024 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	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	www.wago.com/248-501/000-002
	Item no.: 248-501/000-005 Mini-WSB marking card; as card; plain; snap-on type	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	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	www.wago.com/248-501/000-007
	Item no.: 248-501/000-012 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	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	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	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	www.wago.com/248-501/000-024

	**Item no.: 750-103** Group marker carrier	www.wago.com/750-103
	**Item no.: 750-107** Group marker carrier	www.wago.com/750-107

Supply module

	**Item no.: 750-601** Power Supply; 24 VDC	www.wago.com/750-601
	**Item no.: 750-602** Power Supply; 24 VDC	www.wago.com/750-602
	**Item no.: 750-610** Power Supply; 24 VDC; fuse holder; Diagnostics	www.wago.com/750-610
	**Item no.: 750-612** Power Supply; 0 … 230 V AC/DC	www.wago.com/750-612

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** 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

Downloads

Documentation

Manual

8-channel, 0/4 - 20mA	Jun 9, 2017	3.2 MB	Download

Bid Text

750-496	Jan 20, 2016	DOC 28.7 kB	Download

Additional Information

Disposal; Electrical and electronic equipment, Packaging	Oct 15, 2018	265.8 kB	Download

System Description

750/753 Series I/O-System – General Product Information	May 29, 2018	2.0 MB	Download
Design Notes Basic conditions and recommendations for higher operational safety	May 3, 2011	1.5 MB	Download
Overview on WAGO-I/O-SYSTEM 750 approvals	Jun 6, 2017	314.9 kB	Download

Use in Hazardous Environments Term definition, marking and installation regulations	May 8, 2014	1.0 MB	Download

Application Notes

Application Note CoDeSys 2.3

Application Note Library ModuleAccess_01 These instructions describe the use of the ModuleAccess_01.lib library using 4 examples.	Jan 29, 2016	1.0 MB	Download

Libraries

Library

ModuleAccess_01.lib The ModuleAccess_01 library provides both module configuration and access to its process data within a CoDeSys project without the use of WAGO I/O Check.	Feb 16, 2018	1.5 MB	Download

smartDATA

CAD data

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Product family

750/753 Series I/O-System
Learn more about the product family.

Show all products from the family

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