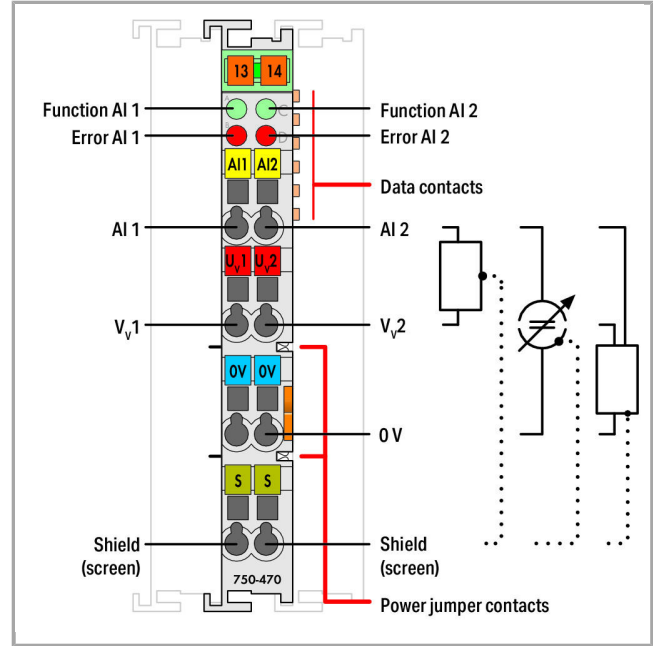


Data sheet | Item number: 750-470  
2-channel analog input; 0 ... 20 mA; Single-ended

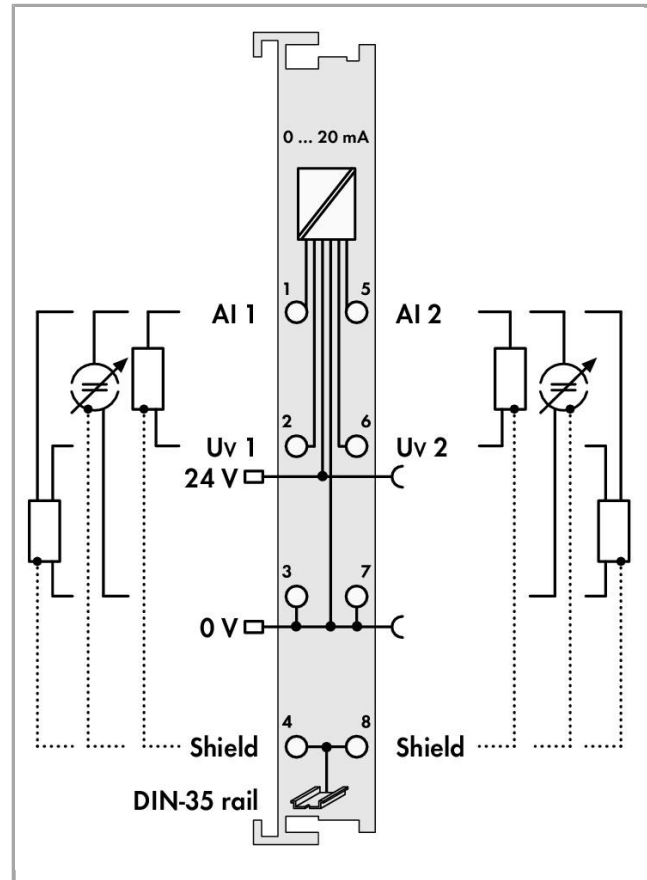
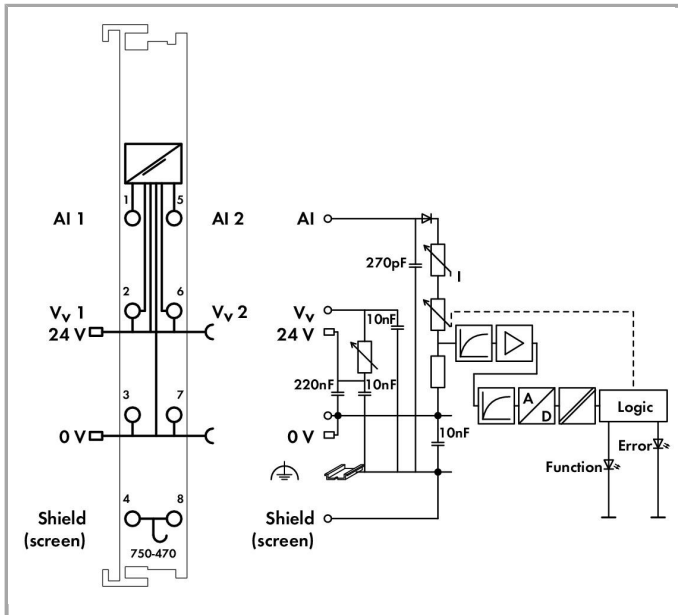


750-470



RoHS  Compliant

[BOMcheck.net](https://www.bomcheck.net)



## Item description

The analog input module processes signals of a standard magnitude 0–20mA.

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

The 24V supply for the field is derived from the module's power jumper contacts.

The shield (screen) is directly connected to the DIN rail.

This module can supply the short-circuit-proof voltage for 2-wire transducers.

A short circuit to power is indicated as an error/fieldbus failure and a message is sent to the supervisory control.

## Data

### Technical Data

Number of analog inputs	2
Total number of channels (module)	2
Type of signal	Current
Type of signal current	DC 0 ... 20 mA
Sensor connection	2 x (2-conductor, 3-conductor)
Eingangsfrequenz analog	50 Hz



Input voltage	non-linear, overload protected $V = 1.2 V + 100 \Omega \times I$ meas.
Signal characteristic	Single-ended
Resolution [bit]	12 Bit
Input resistance max.	160 $\Omega$
Bit width	2 x 16-bit data; 2 x 8-bit control/status (optional)
Noise rejection at sampling frequency	-100 dB
Noise rejection above sampling frequency	-40 dB
Conversion time (typ. $\leq$ )	80 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)	100 mA
System and sensor supply voltage	)
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	8 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

### Geometrical Data

Width	12 mm / 0.472 inch
Height	69.8 mm / 2.748 inch
Height from upper-edge of DIN-35 rail	62.6 mm / 2.465 inch
Depth	100 mm / 3.937 inch

### Mechanical data

Type of mounting	DIN-35 rail
------------------	-------------

### Material Data

Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Fire load	1.237 MJ

Weight	52 g
Conformity marking	1

### Environmental Requirements

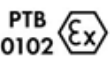


Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95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

### Commercial data



Product Group	15 (Remote I/O)
Country of origin	DE
GTIN	4050821866985
Customs Tariff No.	85389099990

### Approvals / Certificates

#### Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TÜV 07 ATEX 554086 X en.
	TUEV Nord TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 09.0001 X
	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- REM-W43- AIM750
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- AIM750

## Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1821926
	ABS American Bureau of Shipping	Rules for class. of Steel Ships	16- HG1554285- PDA
	BV Bureau Veritas S.A.	-	13453/DO BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194
	KR Korean Register of Shipping	-	HMB05880- AC001
	LR Lloyds Register	-	02/20026 (E5)
	NK Nippon Kaiji Kyokai	-	TA17255M
	PRS	-	TE/2236



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RINA  
RINA Germany GmbH








ELE134212XG


















## UL-Approvals


















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


















## Compatible products

## system box

	<b>Item no.: 850-804</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip	850-804
	<b>Item no.: 850-804/000-001</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip	850-804
	<b>Item no.: 850-805</b> IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip	850-805
	<b>Item no.: 850-814/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate	850-814
	<b>Item no.: 850-815/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate	850-815
	<b>Item no.: 850-816/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate	850-816
	<b>Item no.: 850-817/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate	850-817
	<b>Item no.: 850-825</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20	850-825

	<b>Item no.: 850-826</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	850-826
	<b>Item no.: 850-826/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	850-826 /002-000
	<b>Item no.: 850-827</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	850-827
	<b>Item no.: 850-827/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	850-827 /002-000
	<b>Item no.: 850-828</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	850-828
	<b>Item no.: 850-828/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	850-828 /002-000
	<b>Item no.: 850-834</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20	850-834
	<b>Item no.: 850-835</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	850-835
	<b>Item no.: 850-836</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	850-836
<b>Supply module</b>		
	<b>Item no.: 750-601</b> Power Supply; 24 VDC	750-601
	<b>Item no.: 750-602</b> Power Supply; 24 VDC	750-602
	<b>Item no.: 750-610</b> Power Supply; 24 VDC; fuse holder; Diagnostics	750-610
	<b>Item no.: 750-612</b> Power Supply; 0 ... 230 V AC/DC	750-612
<b>Carrier rail</b>		
	<b>Item no.: 210-112</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm	210-112
	<b>Item no.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715	210-113
	<b>Item no.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715	210-114
	<b>Item no.: 210-115</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm	210-115

	<b>Item no.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	210-118
	<b>Item no.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715	210-196
	<b>Item no.: 210-197</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	210-197
	<b>Item no.: 210-198</b> Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	210-198
	<b>Item no.: 210-504</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	210-504
	<b>Item no.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	210-505
	<b>Item no.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	210-506
	<b>Item no.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	210-508
<b>Marking accessories</b>		
	<b>Item no.: 2009-145</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145
	<b>Item no.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145 /000-002
	<b>Item no.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145 /000-005
	<b>Item no.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145 /000-006
	<b>Item no.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145 /000-007
	<b>Item no.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145 /000-012
	<b>Item no.: 2009-145/000-023</b> Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145 /000-023
	<b>Item no.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-145 /000-024
	<b>Item no.: 248-501</b> Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card	248-501

	<b>Item no.: 248-501/000-002</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-002
	<b>Item no.: 248-501/000-005</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-005
	<b>Item no.: 248-501/000-006</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-006
	<b>Item no.: 248-501/000-007</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-007
	<b>Item no.: 248-501/000-012</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-012
	<b>Item no.: 248-501/000-017</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-017
	<b>Item no.: 248-501/000-023</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-023
	<b>Item no.: 248-501/000-024</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type	248-501 /000-024
	<b>Item no.: 750-100</b> Marker card; as a DIN A4 sheet; plain	750-100
	<b>Item no.: 750-103</b> Group marker carrier	750-103
	<b>Item no.: 750-106</b> Group marker carrier	750-106
<b>shield connection</b>		
	<b>Item no.: 790-108</b> Shield clamping saddle; 11 mm wide; diameter of compatible conductor	790-108
	<b>Item no.: 790-116</b> Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	790-116
	<b>Item no.: 790-124</b> Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm	790-124
	<b>Item no.: 790-140</b> Shield clamping saddle; diameter of compatible conductor	790-140
	<b>Item no.: 790-208</b> Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	790-208
	<b>Item no.: 790-216</b> Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm	790-216



Item no.: 790-220

Shield clamping saddle; 30 mm wide; 6 ... 20 mm

790-220

## Downloads

## Documentation

## Manual

2-channel, 0-20mA, single-ended short-circuit protected	V 1.1.0	pdf 2.1 MB	Download
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## Bid Text

750-470 IO-Klemmen	Oct 2, 2014	doc 30.2 kB	Download
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## Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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## System Description

Design Notes Basic conditions and recommendations for higher operational safety	V 2.0.0	pdf 1.5 MB	Download
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Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0	pdf 1.0 MB	Download
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Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
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## CAD/CAE - Smart Data

## CAD data

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## Device Files

## Device Driver

WAGO USB Service Cable Driver / 750 and 857 Series 759-923	6.5.3.0 Sep 10, 2014	zip 4.8 MB	Download
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Product family

**750/753 Series I/O-System**

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