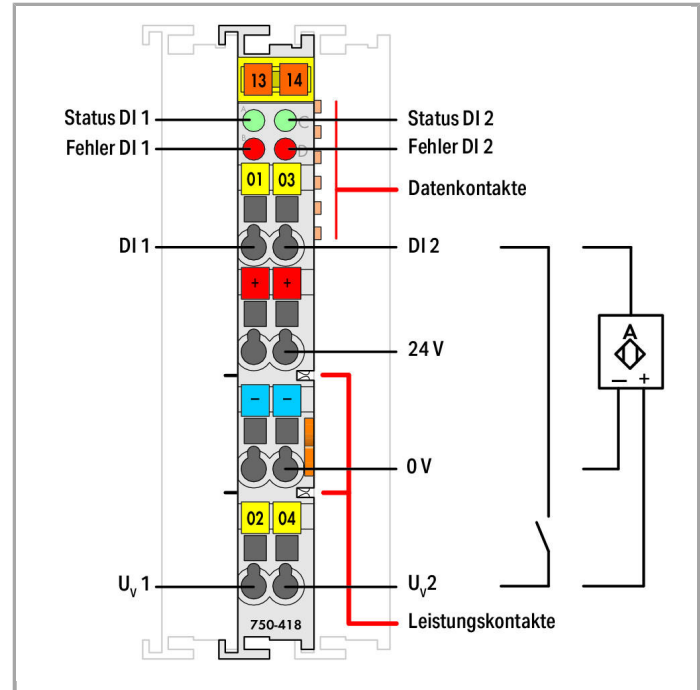
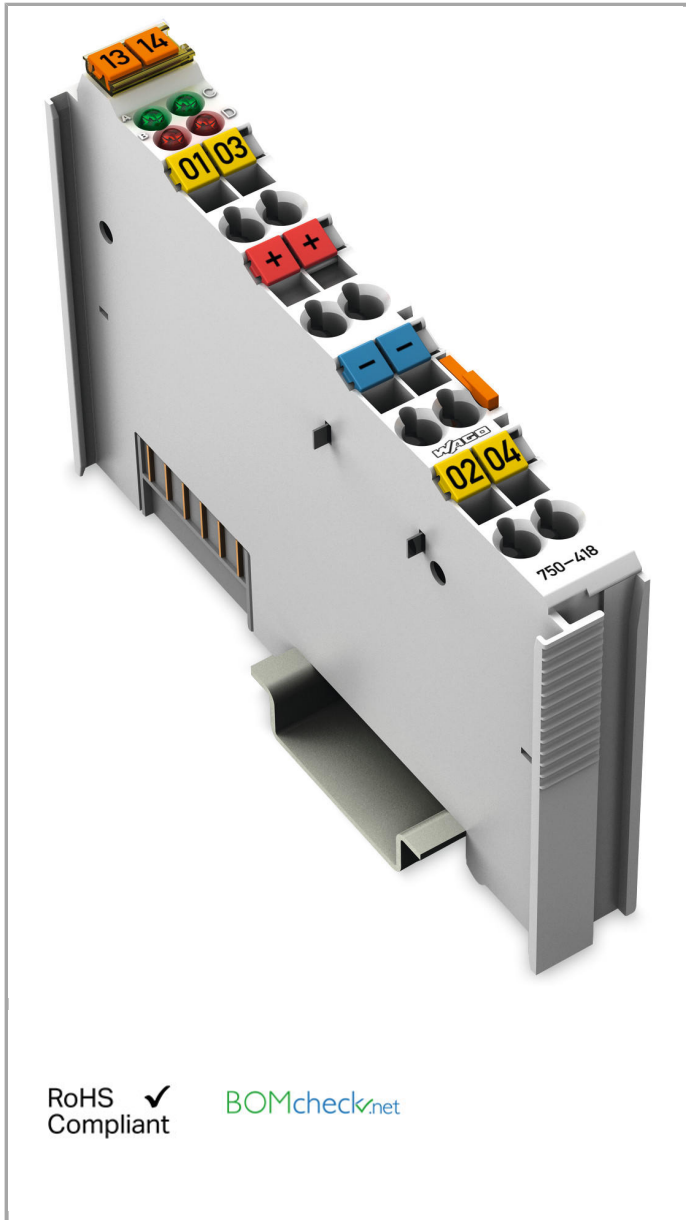


Data sheet | Item number: 750-418

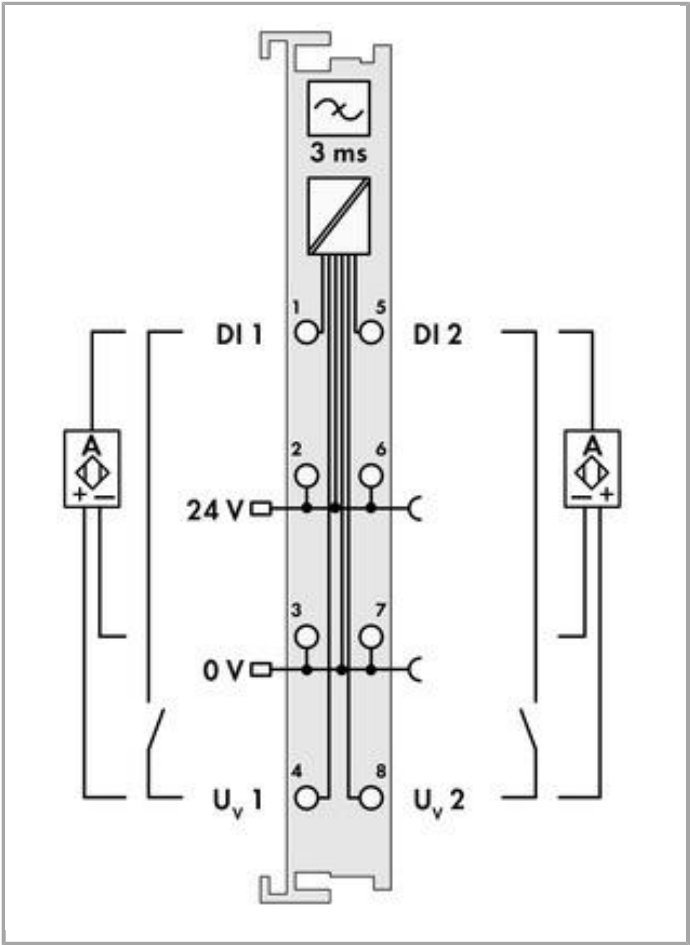
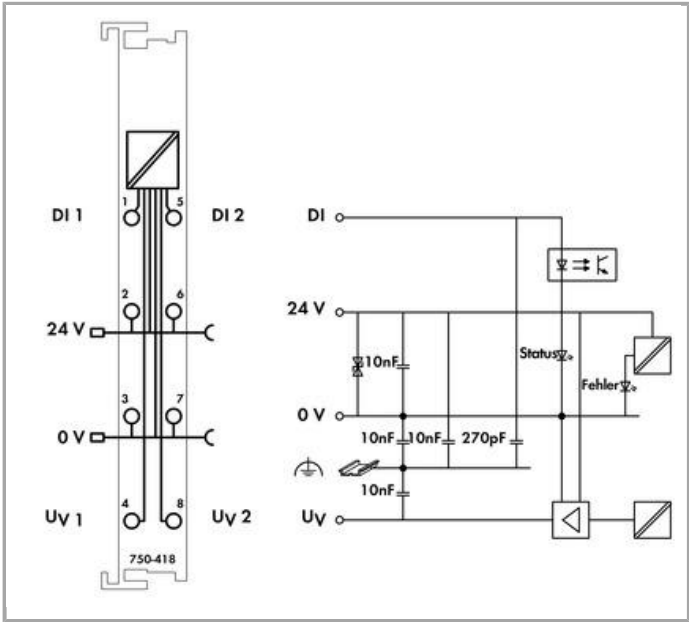
2-channel digital input; 24 VDC; 3 ms; Acknowledgement; Diagnostics

www.wago.com/750-418



RoHS  Compliant

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



Item description

The digital input module receives control signals from digital field devices and supplies sensors with power protected against short circuits. The module transfers the control signals and other information via fieldbus coupler to a supervisory control.

Each input module has a noise-rejection filter.

Each sensor can be supplied separately. A short circuit to ground is indicated as an error/fieldbus failure and a message is sent to the supervisory control.

The error is canceled automatically via the control system after it has been rectified. (Active acknowledgement by a user)

Field and system levels are electrically isolated.

Data
Technical Data

Number of digital inputs	2
Total number of channels (module)	2
Type of signal	Voltage
Type of signal voltage	DC 24 V
Sensor supply voltage	24 V DC; short-circuit-protected, isolated channels



Sensor connection	2 x (2-conductor, 3-conductor)
Input characteristic	high-side switching
Input filter (digital)	3 ms
Input current per channel for signal (1) typ.	3.7 mA
Output current per channel	0.5 A
Short-circuit current	1.5 A, undulating because of thermal overload protection
Voltage range for signal (0)	-3 ... +5 VDC
Voltage range for signal (1)	15 ... 30 VDC
Diagnostics	Short circuit, active acknowledgement after error rectified
Datenbreite Eingangsdaten (intern) max.	4 Bit
Datenbreite Ausgangsdaten (intern) max.	4 Bit
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	12 mA
Field supply voltage	DC 24 V (-25 ... 30 %); über Leistungskontakte (Einspeisung über Messerkontakt; Weiterleitung über Federkontakt)
Isolation field – system	500 VAC (1 min)
Indicators	LED (A, C) green: Status DI 1, DI 2; LED (B, D) red: Error DI 1, DI 2
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity of the power jumper contacts	10 A

Connection data

Connection technology: In-/Outputs	8 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 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
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Material Data

Color	lichtgrau
Housing material	Polycarbonate, polyamide 6.6



Weight	49.5 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, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications
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

Country of origin	DE
GTIN	4017332640855
Customs Tariff No.	85389099990
Product Group	15 (Remote I/O)

Approvals / Certificates

Ex-Approvals

Logo	Approval	Certificate name
	ATEX TUEV Nord Cert GmbH	TÜV 07 ATEX 554086 X en.
	INMETRO TÜV Rheinland do Brasil Ltda.	BR-Ex_TÜV 12.1297 X
	TUEV Nord TUEV Nord Cert GmbH	IECEx TUN 09.0001 X
	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-DIM750

Ship Approvals

Logo	Approval	Certificate name
	ABS American Bureau of Shipping	16-HG1554285-PDA
	BV Bureau Veritas S.A.	13453/DO BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAA0000194
	DNV GL Det Norske Veritas, Germanischer Lloyd	TAA0000194
	DNV DNV Germany GmbH	A-14093
	GL Germanischer Lloyd	26 898 - 05 HH
	LR Lloyds Register	02/20026 (E5)
	NK Nippon Kaiji Kyokai	TA17255M
	PRS	TE/1989/880590/13



Polski Rejestr Statkow



RINA
RINA Germany GmbH

ELE134212XG

UL-Approvals

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

Compatible products

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

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

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	www.wago.com/850-835



grip

**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
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; 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.: 750-100
Marker card; as a DIN A4 sheet; plain

www.wago.com/750-100



Item no.: 750-103
Group marker carrier

www.wago.com/750-103



Item no.: 750-106
Group marker carrier

www.wago.com/750-106

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



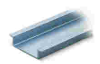
Item no.: 210-115
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm

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



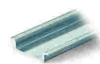
Item no.: 210-198
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

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

Downloads

Documentation

Manual

2-channel, 24VDC, 3.0ms	Dec 19, 2013		Download
2- to 3-wire connection, high-side switching, with diagnostics (acknowledgement)		2.0 MB	

Bid Text

750-418	Jan 20, 2016	DOC	Download
IO-Klemmen		27.1 kB	

Additional Information

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

System Description

750/753 Series I/O-System – General Product Information	May 29, 2018		Download
		2.0 MB	

Overview on WAGO-I/O-SYSTEM 750 approvals	Jun 6, 2017		Download
		314.9 kB	

Design Notes	May 3, 2011		Download
Basic conditions and recommendations for higher operational safety		1.5 MB	

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

smartDATA

CAD data

3D Download 750-418		URL	Download
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Device Files

Device Driver

WAGO USB Service Cable Driver / 750 and 857 Series	6.5.3.0	ZIP	Download
	Sep 10, 2014	4.8 MB	



Product family

750/753 Series I/O-System

Learn more about the product family.

Show all products from the family

Subject to changes.

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