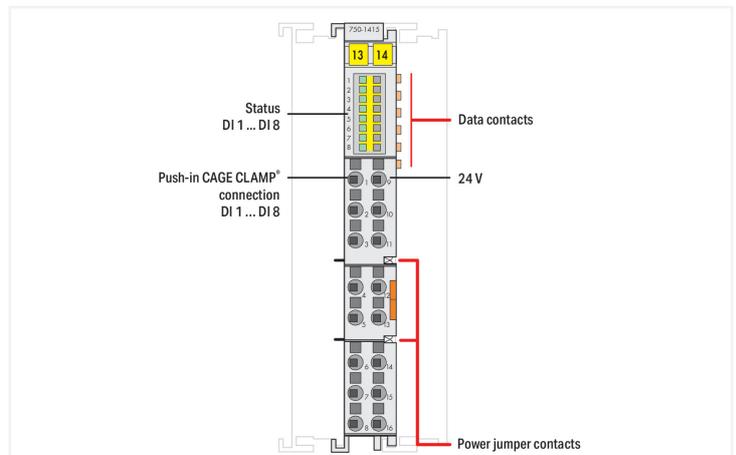
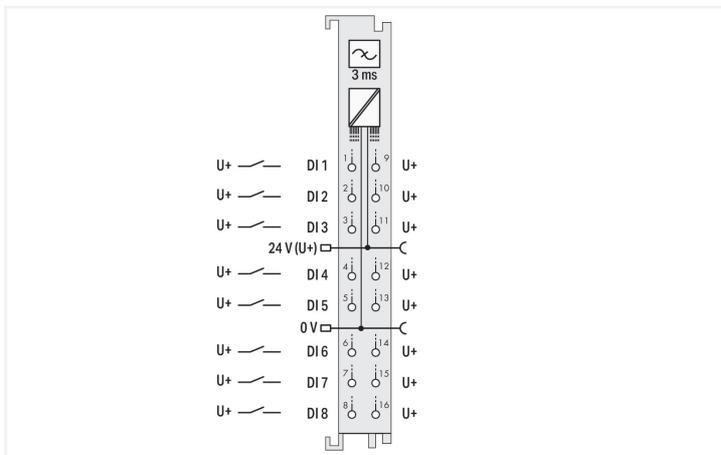
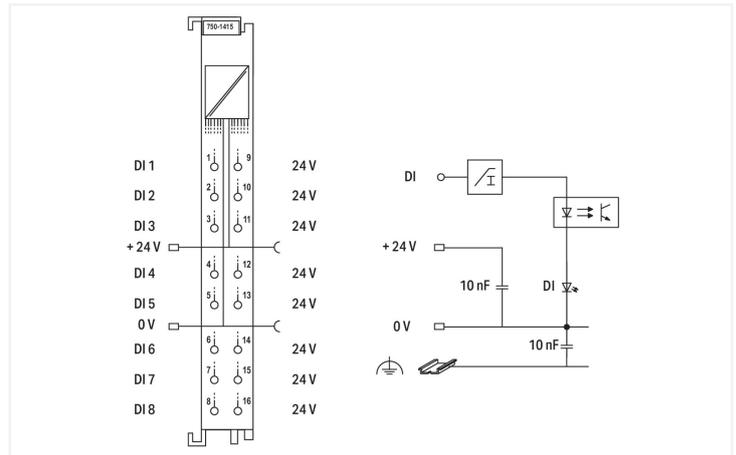


Data Sheet | Item Number: 750-1415
8-channel digital input; 24 VDC; 3 ms; 2-conductor connection

<https://www.wago.com/750-1415>



This digital input module is a 2-wire device featuring eight channels in a width of just 12 mm (0.47 inch). It receives binary control signals from digital field devices (e.g., sensors, encoders, switches or proximity sensors). The module features Push-in CAGE CLAMP® connections enabling solid conductors to be connected by simply pushing them in. Each input channel has a noise-rejection RC filter with 3.0 ms time constant. A green LED indicates the signal state of each channel. Field and system levels are electrically isolated. An operating tool with a 2.5 mm blade (210-719) is required to open the Push-in CAGE CLAMP® connections.

Technical data	
Number of digital inputs	8
Total number of channels (module)	8
Signal type	Digital
Signal type (voltage)	24 VDC
Sensor connection	8 x (2-wire)
Input characteristic	high-side switching Type 3
Input filter (digital)	3 ms
Input current per channel for signal (0) typ.	1.6 mA
Input current per channel for signal (1) typ.	4.5 mA
Input current per channel for signal (1) min.	4.3 mA
Input current per channel for signal (1) max.	4.6 mA
Voltage range for signal (0)	-3 ... +5 VDC
Voltage range for signal (1)	11 ... 30 VDC
Sensor supply	24 VDC
Input data width (internal) max.	8 bits
Supply voltage (system)	5 VDC; via data contacts

Technical data

Current consumption (5 V system supply)	6 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Current consumption, field supply (module with no external load)	2 mA
Isolation	500 V system/field
Indicators	LED (1-8) green: Status DI 1 ... DI 8
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A

Connection data

Connection technology: inputs/outputs	16 x Push-in CAGE CLAMP® (inputs)
Connectable conductor materials	Copper
Connection type 1	Input
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 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
Pluggable connector	fixed

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	0.995 MJ
Weight	45.3 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
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, marine applications
EMC emission of interference	per EN 61000-6-3, 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

Product Group	15 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821085621
Customs tariff number	85389099990

Product classification

UNSPSC	32151705
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Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	eb224ac3-cf65-43db-8fe2-d880a2cd17f7
SCIP notification number (Belgium)	8cf282d3-7c82-4c45-a459-2099f2ba6d06
SCIP notification number (Bulgaria)	cc3a17cd-4d0c-49cc-b63c-c11456d3ac16
SCIP notification number (Czech Republic)	70b311c9-b3fe-40a6-8599-036bedd35dad
SCIP notification number (Denmark)	2154ebb9-cd01-49fe-a03e-64d8c5200871
SCIP notification number (Finland)	52dcc745-c6ae-4402-b075-bee70ec709c6
SCIP notification number (France)	45142909-9fb6-44bd-918d-b12b4d198c78
SCIP notification number (Germany)	27194ffc-c683-40db-96fc-5a681848237a
SCIP notification number (Hungary)	00f69f70-b0c2-4dcc-955c-afa3ba41c858
SCIP notification number (Italy)	6ef552d0-8b39-4b29-82c9-189933dcd75c
SCIP notification number (Netherlands)	9d807b8a-e0fa-47cb-b91b-2537ea49aeb0
SCIP notification number (Poland)	76f2793d-e622-4ec6-9740-d899d4634d99
SCIP notification number (Romania)	235e101a-19f6-4a2f-9767-a4f30f4b6fd3
SCIP notification number (Sweden)	7ea28344-56db-4e91-94c1-8a1fc7244205

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-DIM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	30389/C0 BV
DNV DNV GL SE	DNV-CG-0339, Aug. 2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas



Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
CCCEX CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TUV Rheinland do Brasil Ltda.	IEC 60079-0	TUV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-1415 ↓

Documentation

Manual			
Product Manual 8-channel, 24VDC, 3.0ms	V 2.0.0 06.09.2022	pdf 2979.82 KB	↓
System Manual Series 750/753			↓

System Description		
750/753 Series I/O-System – General Product Information	pdf 953.35 KB	↓
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	↓

Bid Text			
750-1415	19.02.2019	xml 4.68 KB	↓
750-1415	12.07.2017	doc 26.50 KB	↓

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB	↓

Application Notes

Application note, other

pdf
2174.17 KB



CAD/CAE-Data

CAD data

2D/3D Models
750-1415



CAE data

EPLAN Data Portal
750-1415



WSCAD Universe
750-1415



ZUKEN Portal
750-1415



Device Files

Device Driver

WAGO USB Service Ka- 6.5.3.0 zip
bel Treiber / Serie 750 10.09.2014 4721.96 KB
und 857



1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories



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



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



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



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



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



Item No.: 210-114

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



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



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



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



Item No.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



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



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

1.1.2 Marking

1.1.2.1 Group marker carrier



Item No.: 750-107
Group marker carrier

1.1.2.2 Marker

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

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

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

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

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

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

Item No.: 2009-145
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

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



Item No.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

Item No.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

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

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



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

Item No.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

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

Item No.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 248-501/000-002
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

1.1.2.3 Marker carrier



Item No.: 750-103
Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles



Item No.: 790-108
Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



Item No.: 790-208
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



Item No.: 790-116
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



Item No.: 790-216
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



Item No.: 790-124
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



Item No.: 790-220
Shield clamping saddle; 30 mm wide; 6 ... 20 mm



Item No.: 790-140
Shield clamping saddle; diameter of compatible conductor

1.1.4 Supply module

1.1.4.1 Supply module



Item No.: 750-612

Power Supply; 0 ... 230 V AC/DC

Item No.: 750-602

Power Supply; 24 VDC

Item No.: 750-601

Power Supply; 24 VDC; fuse holder

Item No.: 750-610

Power Supply; 24 VDC; fuse holder; Diagnostics

1.1.5 System enclosure

1.1.5.1 System enclosure



Item No.: 850-825

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

Item No.: 850-826

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

Item No.: 850-827

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

Item No.: 850-828

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



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

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

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

Item No.: 850-834

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20



Item No.: 850-835

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

Item No.: 850-836

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

Item No.: 850-814/002-000

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

Item No.: 850-815/002-000

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



Item No.: 850-816/002-000

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

Item No.: 850-817/002-000

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

1.1.6 Tool

1.1.6.1 Operating tool



Item No.: 210-719

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