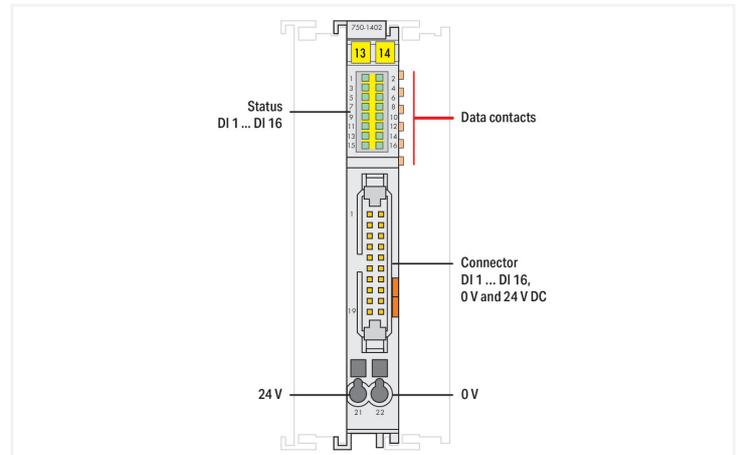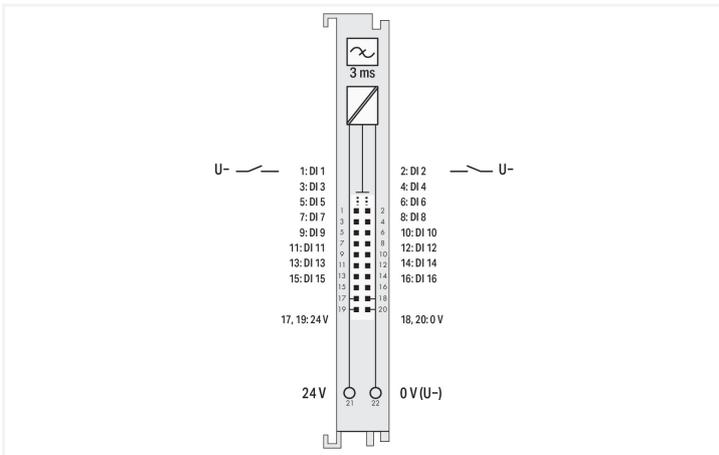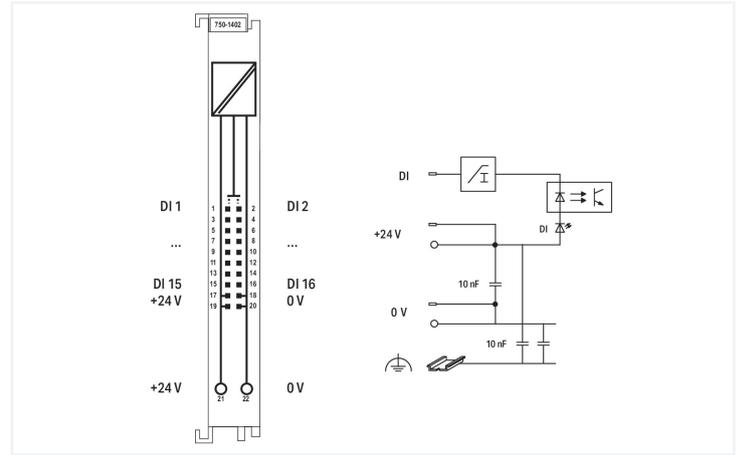# Data Sheet | Item Number: 750-1402

16-channel digital input; 24 VDC; 3 ms; Low-side switching; Ribbon cable

https://www.wago.com/750-1402

Color: ■ light gray

This digital input module features 16 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 connects to electronic modules via a 20-pole ribbon cable.

The 24 V power is fed to the electronic modules via two CAGE CLAMP® connectors.

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.

Technical data

Number of digital inputs	16
Total number of channels (module)	16
Signal type	Digital
Signal type (voltage)	24 VDC
Sensor connection	16 x (1-wire)
Input characteristic	low-side switching
Input filter (digital)	3 ms
Input current per channel for signal (0) typ.	2.3 mA
Input current per channel for signal (0) min.	-2.1 mA
Input current per channel for signal (0) max.	-2.4 mA
Input current per channel for signal (1) typ.	-0.6 mA
Voltage range for signal (0)	$(U_V - 5\ V) \ldots U_V$ DC
Voltage range for signal (1)	$-3\ VDC \ldots (U_V - 15\ V)$
Sensor supply	24 VDC
Input data width (internal) max.	16 bits
Supply voltage (system)	5 VDC; via data contacts

Technical data

Current consumption (5 V system supply)	25 mA
Supply voltage (field)	24 VDC (-25 … +30 %); via pluggable connector (CAGE CLAMP® connection)
Isolation	500 V system/field
Indicators	LED (1-16) green: Status DI 1 … DI 16

Connection data

Connection technology: inputs/outputs	1 x Connector per DIN 41651; Male connector (20-pole) (inputs)		
		Connection type 1	Input
Connectable conductor materials	Copper		
Connection type 1	Input		
Connection technology: field supply	2 x CAGE CLAMP®		
Connection type	Field supply		
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 inches		

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	74.1 mm / 2.917 inches
Depth from upper-edge of DIN-rail	66.9 mm / 2.634 inches

Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	fixed

Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.073 MJ
Weight	41.1 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 … +55 ℃
Ambient temperature (storage)	-40 … +85 ℃
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_2S 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
Customs tariff number	85389099990

Product classification

UNSPSC	32151705

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	7(a) 7(c)-I
SCIP notification number (Austria)	5bb9421e-6703-4356-af6e-f075fb6a06a8
SCIP notification number (Belgium)	9e2a67f7-50d7-4fe6-950a-c86f7c5ef12f
SCIP notification number (Bulgaria)	66c6029d-5a3c-44b1-af6c-963f4f27ad6b
SCIP notification number (Czech Republic)	98aa44a9-8575-4f7b-a81b-6d2023e875de
SCIP notification number (Denmark)	feb5d862-9cf1-466a-988e-4beb2afda27f
SCIP notification number (Finland)	2a440230-a531-45e5-8542-9967d2a2be03
SCIP notification number (France)	d3570300-a94e-4449-ae3d-7b567e97d949
SCIP notification number (Germany)	d83b96d9-54d3-43fc-ab9e-b5d516757aa5
SCIP notification number (Hungary)	004a0c58-c248-43fc-acf3-d5f6acae17b7
SCIP notification number (Italy)	e102d78a-7374-4c73-b116-96da76a19c3d
SCIP notification number (Netherlands)	d6a286b8-c510-4732-9d47-407483f27499
SCIP notification number (Poland)	56220c96-9b04-4c3d-ae96-a29dad104a8e
SCIP notification number (Romania)	d54ad6a4-a4c2-4e0b-96ef-bf7ef660960e
SCIP notification number (Sweden)	f7370679-7133-410e-93a4-174370f0ccce

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 LOCATI-ONS)	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 TÜV Rheinland do Brasil Ltda.	IEC 60079-0	TÜV 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 750-1402	↓

Documentation

Manual

Product Manual 16-channel, 24VDC	V 2.0.0 06.09.2022	pdf 2878.85 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

750-1402	19.02.2019	xml 4.51 KB	↓
750-1402	12.07.2017	doc 27.00 KB	↓

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB	↓

CAD/CAE-Data

CAD data

2D/3D Models 750-1402	↓

CAE data

EPLAN Data Portal 750-1402	↓
WSCAD Universe 750-1402	↓
ZUKEN Portal 750-1402	↓

Device Files

Device Driver

WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip 4721.96 KB	↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cables and connectors

1.1.1.1 System cable

Item No.: 706-3057/300-100
System cable; for Schneider TSX; 16 digital inputs or outputs; Length: 1 m; Conductor cross-section: 0.14 mm²

Item No.: 706-3057/300-200
System cable; for Schneider TSX; 16 digital inputs or outputs; Length: 2 m; Conductor cross-section: 0.14 mm²

Item No.: 706-3057/300-300
System cable; for Schneider TSX; 16 digital inputs or outputs; Length: 3 m; Conductor cross-section: 0.14 mm²

Item No.: 706-7753/302-100
System cable; for WAGO-I/O-SYSTEM, 750 Series; 8 digital inputs and 8 digital outputs; Length: 1 m; Conductor cross-section: 0.14 mm²

Item No.: 706-7753/302-200
System cable; for WAGO-I/O-SYSTEM, 750 Series; 8 digital inputs and 8 digital outputs; Length: 2 m; Conductor cross-section: 0.14 mm²

1.1.2 DIN-rail

1.1.2.1 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; unslotted; similar 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

WAGO

1.1.3 Interface module

1.1.3.1 Interface adapters

Item No.: 857-986
Interface adapter; 15-pole; High-side switching input

1.1.4 Marking

1.1.4.1 Group marker carrier

Item No.: 750-107
Group marker carrier

1.1.4.2 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

1.1.4.3 Marker carrier

Item No.: 750-103
Group marker carrier

1.1.5 Shield termination

1.1.5.1 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

1.1.6 System enclosure

1.1.6.1 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

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

Current addresses can be found at:: www.wago.com