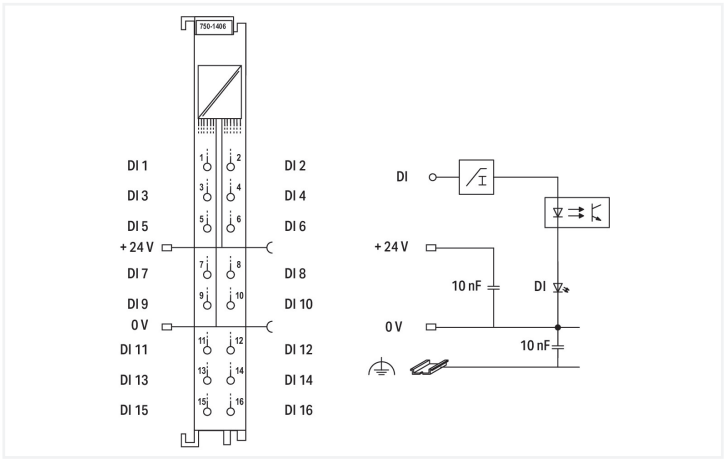
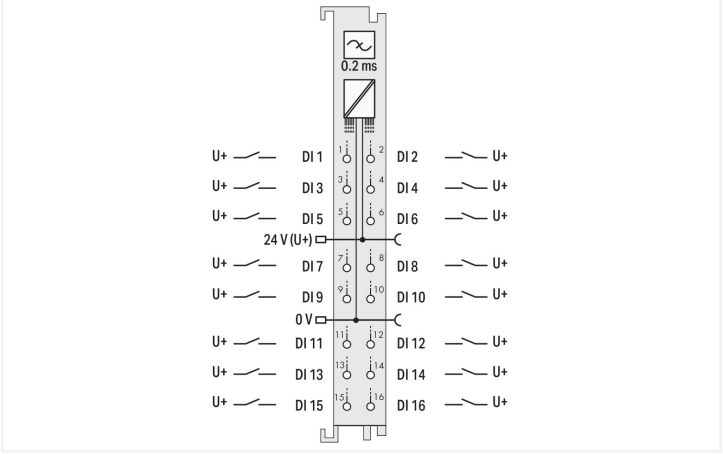
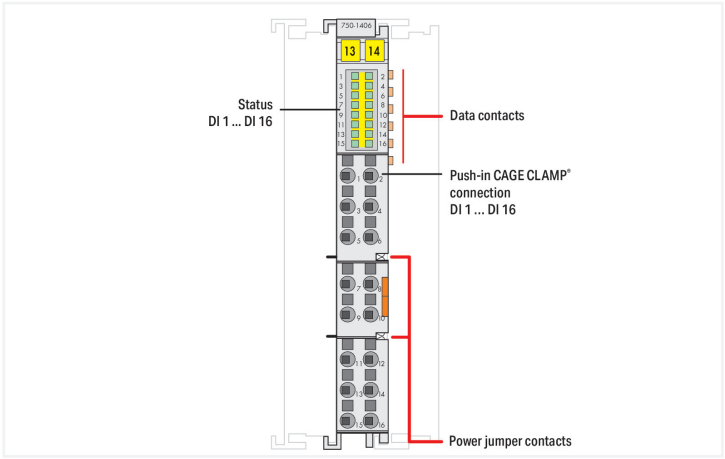
Data Sheet | Item Number: 750-1406

16-channel digital input; 24 VDC; 0.2 ms

https://www.wago.com/750-1406







This digital input module features 16 channels in a width of just 12 mm (0.47 inch).
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 0.2 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	16
Total number of channels (module)	16
Signal type	Digital
Signal type (voltage)	24 VDC
Sensor connection	16 x (1-wire)
Input characteristic	high-side switching
Input filter (digital)	0.2 ms
Input current per channel for signal (0) typ.	0.6 mA
Input current per channel for signal (1) typ.	2.3 mA
Input current per channel for signal (1) min.	2.1 mA
Input current per channel for signal (1) max.	2.4 mA
Voltage range for signal (0)	−3 … +5 VDC
Voltage range for signal (1)	15 … 30 VDC
Input data width (internal) max.	16 bits
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	25 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)

Technical data

Isolation	500 V system/field
Indicators	LED (1-16) green: Status DI 1 … DI 16
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 mm² / 28 … 16 AWG
Fine-stranded conductor	0.25 … 1.5 mm² / 22 … 16 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inches

Connection type 1	Input
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 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	0.837 MJ
Weight	47.5 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_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

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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	7(c)-I
SCIP notification number (Austria)	76fb2cf3-4ce3-49a3-903e-6f9da462b3fa
SCIP notification number (Belgium)	dff73735-a9df-40f9-939a-60db886d01f5
SCIP notification number (Bulgaria)	3fed8029-8891-41bc-ad43-fdd6b00fc15a
SCIP notification number (Czech Republic)	b1f74d6c-d985-43f2-8092-14fc3bc69c92
SCIP notification number (Denmark)	1d82d4db-ace1-4643-9d20-2f53f44e57ae
SCIP notification number (Finland)	3ce8bd00-ab98-4483-86be-74486aefa0eb
SCIP notification number (France)	7fad8e41-bf5f-4718-a10a-9059603c3954
SCIP notification number (Germany)	0706b818-f3da-4c16-a477-49e1f3625199
SCIP notification number (Hungary)	2eaf0f81-287c-499d-90cf-3565347742db
SCIP notification number (Italy)	b3d370fd-2dc1-4b74-bad7-759926a4de00
SCIP notification number (Netherlands)	894bbd3e-0597-48d1-b436-ad0f01ee380e
SCIP notification number (Poland)	96c1a9f6-91fa-4b4f-8faa-f5e35f2410d8
SCIP notification number (Romania)	f83fc3ce-aba9-4edd-9dfc-aab41da4a192
SCIP notification number (Sweden)	4259a6ea-5928-45b5-a8cd-a688fb21b367

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

Approvals for marine applications

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 LOCA-TIONS)	UL 121201	E198726