

**Data sheet | Item number: 750-431**

8-channel digital input; 24 VDC; 0.2 ms

[www.wago.com/750-431](http://www.wago.com/750-431)**Item description**

This digital input module features eight channels in a width of just 12 mm (0.47 inch). It receives control signals from digital field devices (e.g., sensors).

Each input module has a noise-rejection filter.

Field and system levels are electrically isolated.

**Data****Technical data**

Number of digital inputs	8
Total number of channels (module)	8
Signal type	Voltage
Voltage signal type	24 VDC
Sensor connection	8 x (1-wire)
Input characteristic	high-side switching
Input filter (digital)	0.2 ms
Input current per channel for signal (1) (typ.)	2.8 mA
Voltage range for signal (0)	-3 ... +5 VDC
Voltage range for signal (1)	15 ... 30 VDC
Input data width (internal) (max.)	8 bits
Supply voltage (system)	5 VDC; via data contacts
Power consumption (5 V system supply)	17 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Isolation	500 V system/field
Indicators	LED (A-D) green: Status DI 1, DI 3, DI 5, DI 7; LED (E-H) green: Status DI 2, DI 4, DI 6, DI 8
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A

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

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 We are always happy to take your call at 01788 568 008.

**Data sheet | Item number: 750-431**[www.wago.com/750-431](http://www.wago.com/750-431)**Connection data**

Connection technology: inputs/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

**Physical data**

Width	12 mm / 0.472 inch
Height	100 mm / 3.937 inch
Depth	67.8 mm / 2.669 inch
Depth from upper edge of DIN-rail	60.6 mm / 2.386 inch

**Mechanical data**

Mounting type	DIN-35 rail
Wiring interface	Fixed

**Material data**

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.179 MJ
Weight	47.8 g
Conformity marking	CE

**Environmental requirements**

Surrounding air temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying); vertical
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

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EMC emission of interference	per EN 61000-6-4, 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

## Approvals / Certificates

## Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_14_ATEX_148929_X (II 3 G Ex ex IIC T4 Gc)
	CCCEX CQST/CNEx	CNCA-C23-01	2020312310000215 (Ex nA IIC T4 Gc)
	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02.B. 00163/19 (2Ex nA IIC T4 Gc X)
	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	BR-Ex_TÜV 12.1297 X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

## Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C- DE.AM02. B.00087 /19
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43-

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DIM750

## Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ABS</b> American Bureau of Shipping	-	19- HG1821926
	<b>BV</b> Bureau Veritas S.A.	-	13453/DO BV
	<b>DNV</b> DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA0000194
	<b>KR</b> Korean Register of Shipping	-	KR HMB05880- AC001
	<b>LR</b> Lloyds Register EMEA	-	02/20026 (E6)
	<b>NK</b> Nippon Kaiji Kyokai	-	TA17255M
	<b>PRS</b> Polski Rejestr Statków	-	TE/2236 /880590/19
	<b>RINA</b> RINA Germany GmbH	-	ELE066419XG

## UL-Approvals

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

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