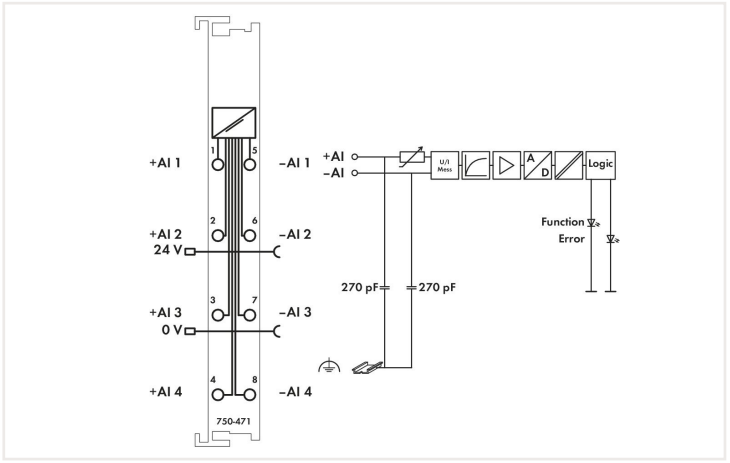
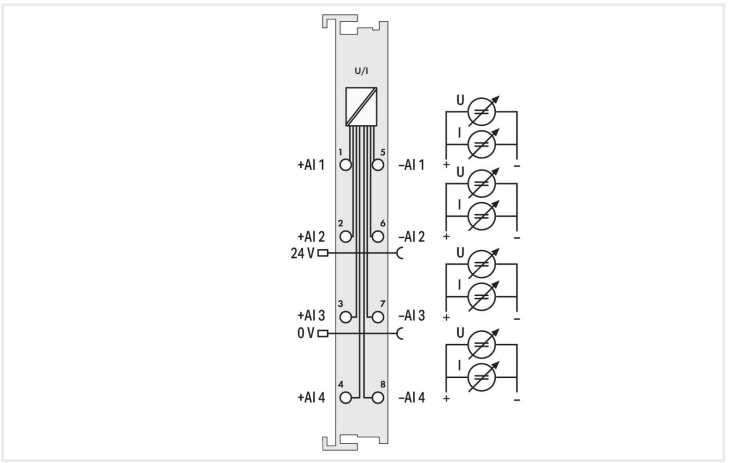
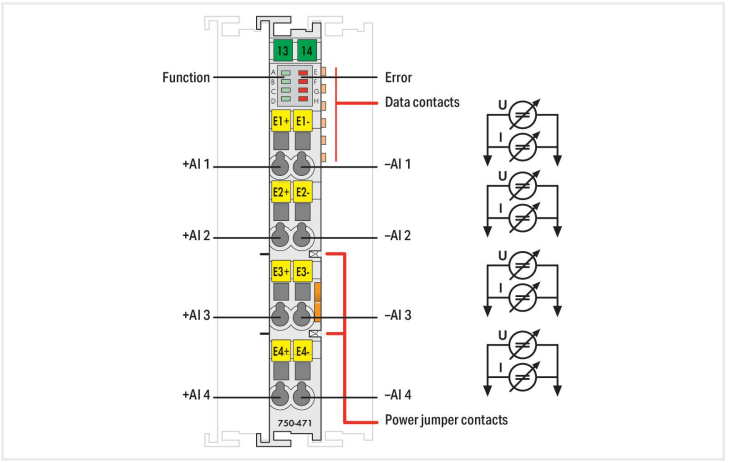
Data sheet | Item number: 750-471

4-channel analog input; Voltage/Current; Differential input; 16 bits; Diagnostics







This analog input module processes both voltage and current differential signals.

- 0 … 20 mA, 4 … 20 mA, 3.6 … 21 mA NE43, ±20 mA, 0 … 10 V, ±10 V, ±200 mV
- Channel-wise parameterizable measurement ranges
- Electrically isolated channels
- 16-bit resolution

A wire break, overload or out-of-measurement range are indicated channel by channel via red LED depending on the set measurement range.
The module can be configured via GSD file, ***e!****COCKPIT* and WAGO-I/O-*CHECK*.

Technical data	
Number of analog inputs	4
Total number of channels (module)	4
Signal type	Current Voltage
Signal type (current)	0 … 20 mADC; 4 … 20 mADC; 3.6 … 21 mADC; -20 … +20 mADC
Signal type (voltage)	0 … 10 VDC; -10 … +10 VDC; -0.2 … +0.2 VDC
Signal type (configurable)	Yes
Sensor connection	4 x (2-wire)
Input filter	50 Hz; 60 Hz; Filter off
Input voltage (max.)	31.2 VDC
Signal characteristics	Differential
Diagnostics	Measurement range overflow/underflow; wire break in operating mode 4 … 20 mA and 3.6 … 21 mA NE43; overload in operating mode 0 … 20 mA, 4 … 20 mA, ±20 mA, 3.6 … 21 mA NE43
Resolution [bit]	16 bits

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Technical data

Input resistance (max.)	120 Ω
Data width	4 x 16-bit data; 4 x 8-bit control/status (optional)
Internal resistance	100 kΩ
Conversion time (typ.)	10 ms
Conversion time	Exception: The ±200 mV measurement range has a conversion time of 10 s and is therefore only suitable for slow systems.
Reference for measurement error	Input ranges
Measurement error (reference temperature)	25 °C
Measurement error, deviation (max.) from the upper-range value	0.1 %
Reference for measurement error (2)	±200 mV
Measurement error, reference temperature (2)	25 °C
Measurement error, deviation (max.) of the upper-range value (2)	0.3 %
Temperature error (max.) of the upper-range value	0.01 %/K
Configuration options	WAGO-I/O-*CHECK* CODESYS Library ***e!****COCKPIT*
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	100 mA
Supply voltage (field)	24 VDC; via power jumper contacts (power supply via blade contact; transmission via spring contact)
Isolation	Functional insulation: 2000 VDC system/channel; 2000 VDC channel/channel
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	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 inches

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	69.8 mm / 2.748 inches
Depth from upper-edge of DIN-rail	62.6 mm / 2.465 inches

Mechanical data

Mounting type	DIN-35 rail

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	0.954 MJ
Weight	51.2 g
Conformity marking	CE

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Environmental requirements

Ambient temperature (operation)	0 … +55 °C
Surrounding air temperature (storage)	-25 … +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 … 2000 m / 0 … 6562 ft
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
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_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

eCl@ss 10.0	27-24-26-01
eCl@ss 9.0	27-24-26-01
ETIM 8.0	EC001596
ETIM 7.0	EC001596
PU (SPU)	1 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4055143764520
Customs tariff number VKOrg Germany	85389099990

Approvals and certificates

Ex-Approvals

Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCCEx CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex nA 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	BR-Ex_TÜV 12.1297 X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Country specific Approvals

Approval	Standard	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-AIM750

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Ship Approvals

Approval	Standard	Certificate name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
RINA RINA Germany GmbH	-	ELE343521XG001

UL-Approvals

Approval	Standard	Certificate name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-471	

Documentation

Manual

4-Channel Analog Input; for Voltage/Current	V 1.1.0 14.02.2022	pdf 4203.06 KB	
System Manual WAGO I/O System 750 / 753	V 3.1.0 11.05.2022	pdf 8495.90 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	
Use in Hazardous Environments	V 1.0.0	pdf 1007.06 KB	

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 259.56 KB	

Bid Text

750-471	19.02.2019	xml 4.99 KB	
750-471	24.07.2018	doc 30.50 KB	

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CAD/CAE-Data

CAD data	CAE data
2D/3D Models 750-471	EPLAN Data Portal 750-471
	ZUKEN Portal 750-471