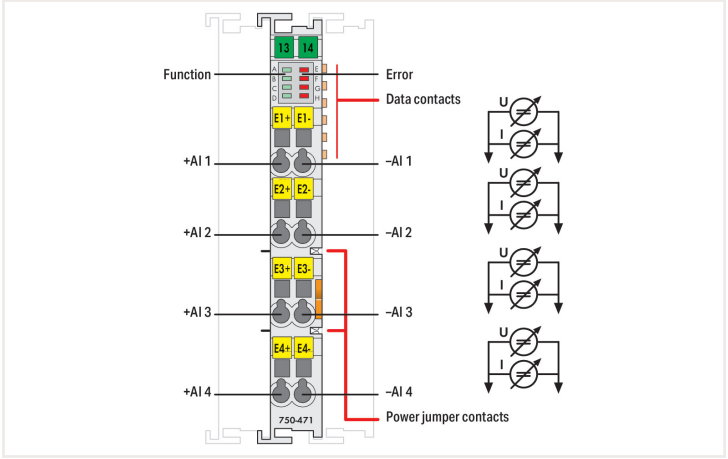
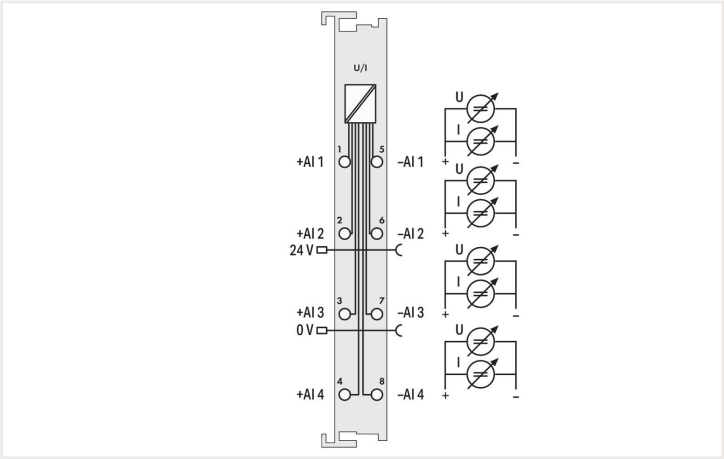
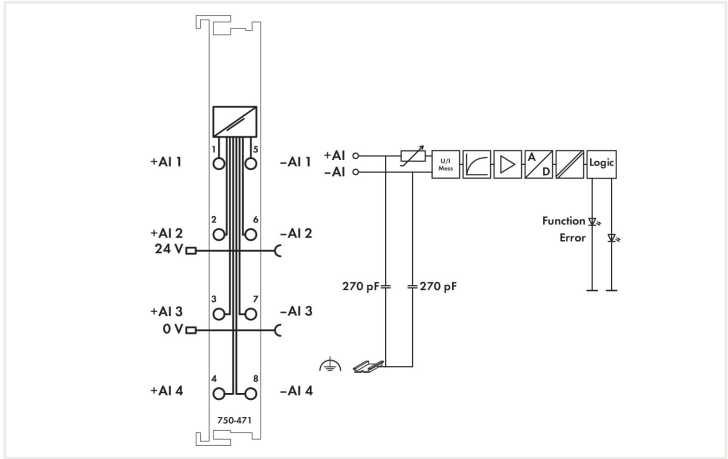




<https://www.wago.com/750-471>



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

- 0 ... 20 mA, 4 ... 20 mA, 3.6 ... 21 mA NE43,  $\pm 20$  mA, 0 ... 10 V,  $\pm 10$  V,  $\pm 200$  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<br>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, $\pm 20$ mA, 3.6 ... 21 mA NE43 |
| Resolution [bit]                  | 16 bits                                                                                                                                                                                     |
| Input resistance (max.)           | 120 $\Omega$                                                                                                                                                                                |

## Technical data

|                                                                  |                                                                                                                         |
|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| 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<br>CODESYS Library<br><b>e!COCKPIT</b>                                                                   |
| 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                           |



| 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 <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                                |

| 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                                                                                                                                                                                                                                                                                                                                                                                |                        |                                       |
| <div><div></div><div>Ex nA IIC T4 Gc</div></div> |                        |                                       |
| Approval                                                                                                                                                                                                                                                                                                                                                                                    | Standard               | Certificate name                      |
| ATEX<br>TUEV Nord Cert GmbH                                                                                                                                                                                                                                                                                                                                                                 | EN 60079-0             |                                       |
| CCCEX<br>CQST/CNEX                                                                                                                                                                                                                                                                                                                                                                          | CNCA-C23-01            | 2020312310000213 (Ex nA IIC T4 Gc)    |
| IECEX<br>TUEV Nord Cert GmbH                                                                                                                                                                                                                                                                                                                                                                | IEC 60079-0            | IECEX_TUN_14.0035_X (Ex ec IIC T4 Gc) |
| INMETRO<br>TÜV Rheinland do Brasil Ltda.                                                                                                                                                                                                                                                                                                                                                    | IEC 60079-0            | BR-Ex_TÜV 12.1297 X                   |
| UL<br>Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)                                                                                                                                                                                                                                                                                                                                  | UL 121201              | E198726 Sec.1                         |
| Country specific Approvals                                                                                                                                                                                                                                                                                                                                                                  |                        |                                       |
|                                                                                                                                                                                                                                                                                                          |                        |                                       |
| Approval                                                                                                                                                                                                                                                                                                                                                                                    | Standard               | Certificate name                      |
| EAC<br>Brjansker Zertifizierungsstelle                                                                                                                                                                                                                                                                                                                                                      | TP TC 020/2011         | EAC RU C-DE.AM02. B.00087/19          |
| KC<br>National Radio Research Agency                                                                                                                                                                                                                                                                                                                                                        | Article 58-2, Clause 3 | MSIP-REM-W43-AIM750                   |



Ship Approvals





| Approval                                                        | Standard                           | Certificate name  |
|-----------------------------------------------------------------|------------------------------------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping                         | -                                  | 22-2219060        |
| BSH<br>Bundesamt fuer See-<br>schifffahrt und Hydrogra-<br>phie | -                                  | 1104              |
| BV<br>Bureau Veritas S.A.                                       | Rules for class. of Steel<br>Ships | 66711/A0          |
| DNV<br>DNV Germany GmbH                                         | DNV-CG-0339,Aug.2021               | TAA0000194        |
| KR<br>Korean Register of Ship-<br>ping                          | -                                  | KR HMB05880-AC001 |
| LR<br>Lloyds Register EMEA                                      | -                                  | LR22180952TA      |
| RINA<br>RINA Germany GmbH                                       | -                                  | ELE343521XG001    |

UL-Approvals



| Approval                                                          | Standard       | Certificate name |
|-------------------------------------------------------------------|----------------|------------------|
| UL<br>Underwriters Laboratories<br>Inc. (ORDINARY LOCATI-<br>ONS) | UL 61010-2-201 | E175199          |

Downloads

Environmental Product Compliance

| Compliance Search                           |
|---------------------------------------------|
| Environmental Product<br>Compliance 750-471 |

Documentation

| Manual                                           |
|--------------------------------------------------|
| 4-Channel Analog In-<br>put; for Voltage/Current |
| V 1.1.0<br>14.02.2022                            |
| pdf<br>4203.06 KB                                |
| ↓                                                |
| System Manual WAGO<br>I/O System 750 / 753       |
| V 3.1.0<br>11.05.2022                            |
| pdf<br>8495.90 KB                                |
| ↓                                                |
| System Manual Series<br>750/753                  |
| ↓                                                |

| System Description                                               |
|------------------------------------------------------------------|
| 750/753 Series I/O-<br>System – General Pro-<br>duct Information |
| pdf<br>953.35 KB                                                 |
| ↓                                                                |
| Overview on WAGO-I/<br>O-SYSTEM 750 appro-<br>vals               |
| pdf<br>770.48 KB                                                 |
| ↓                                                                |
| Use in Hazardous Envi-<br>ronments                               |
| V 1.0.0                                                          |
| pdf<br>1007.06 KB                                                |
| ↓                                                                |

| Additional Information                                         |
|----------------------------------------------------------------|
| Disposal; Electrical and<br>electronic equipment,<br>Packaging |
| V 1.0.0                                                        |
| pdf<br>259.56 KB                                               |
| ↓                                                              |

| Bid Text        |
|-----------------|
| 750-471         |
| 19.02.2019      |
| xml<br>4.99 KB  |
| ↓               |
| 750-471         |
| 24.07.2018      |
| doc<br>30.50 KB |
| ↓               |



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