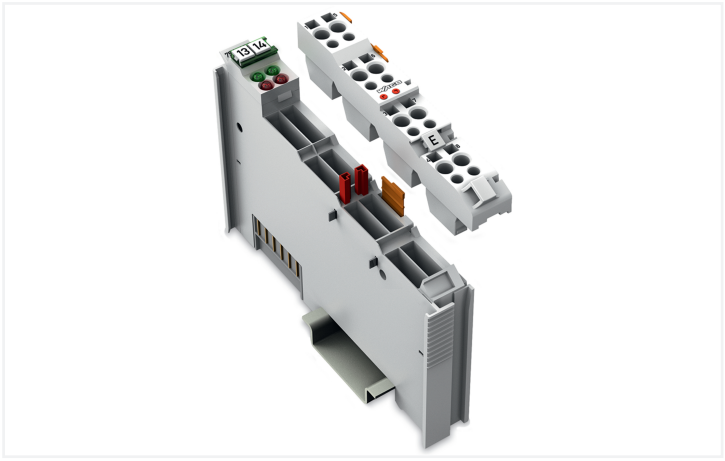
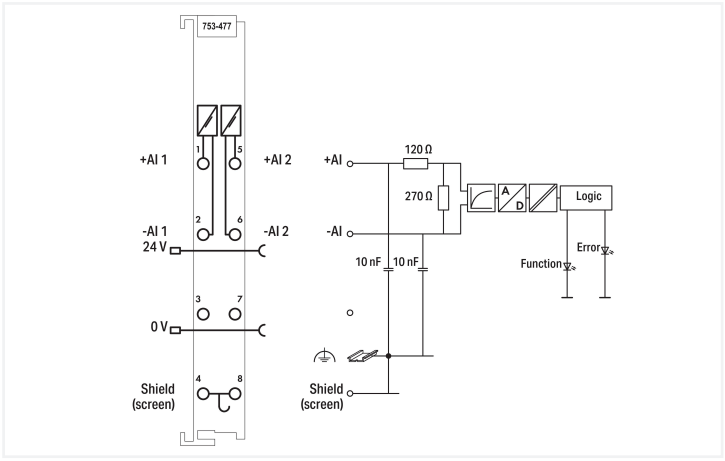
# Data Sheet | Item Number: 753-477

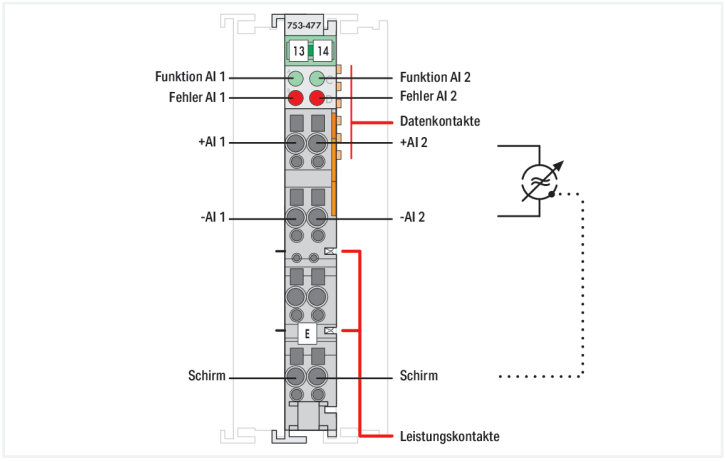
2-channel analog input; 0 … 10 V AC/DC; Differential input

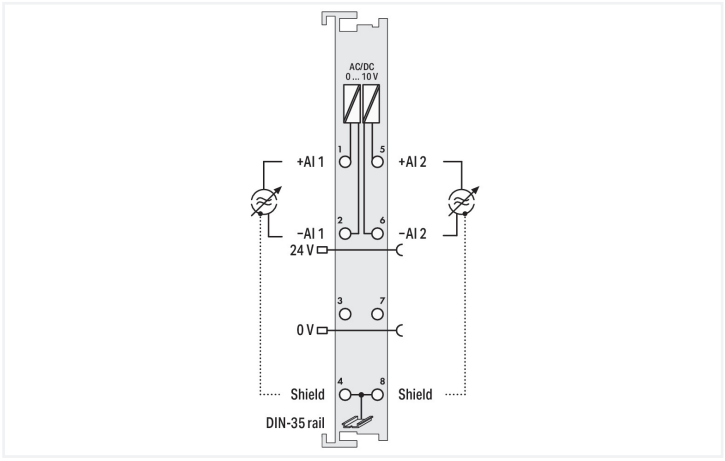
https://www.wago.com/753-477






Color: light gray




This analog input module processes AC and DC voltages ranging from 0 to 10 V (rms).
The module measures the rms value of the voltage and displays it with a resolution of 1 mV.
The maximum voltage must not exceed 20 V.
The differential inputs are electrically isolated.
The fieldside and internal system are electrically isolated.
The system supply powers the module.
The input channels of the module are differential inputs.
The shield directly connects to the DIN-rail.

## Notes

| | |
|---|---|
| Note | Pluggable connectors and coding fingers (753 Series) are not included. |

## Technical data

| | |
|---|---|
| Number of analog inputs | 2 |
| Total number of channels (module) | 2 |
| Signal type | Voltage |
| Signal type (voltage) | 0 … 10 VAC/DC |
| Sensor connection | 2 x (2-wire) |
| Signal characteristics | Differential |
| Resolution [bit] | 15 bits |
| Data width | 2 x 16-bit data; 2 x 8-bit control/status (optional) |
| Internal resistance | 120 kΩ |
| Conversion time (typ.) | 200 ms |
| Measurement error (reference temperature) | 25 °C |
| Measurement error, deviation (max.) from the upper-range value | 0.1 % |
| Measurement error over entire temperature range | ≤ ±0.6 % |
| Temperature coefficient | < ±110 ppm/K of greatest measurement range |
| Supply voltage (system) | 5 VDC; via data contacts |
| Current consumption (system supply) | 80 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) |
| Process data | 0.0 V corresponds to 0x0000; 20 VDC corresponds to 0x4E20 |
| Isolation | 500 V system/field or channel/channel |
| Indicators | LED (A, C) green: Function AI 1, AI 2; LED (B, D) red: Error AI 1, AI 2 |
| Number of incoming power jumper contacts | 2 |
| Number of outgoing power jumper contacts | 2 |

## Connection Data

| | |
|---|---|
| Connection technology: I/O | 6 x CAGE CLAMP® |
| Connectable conductor materials | Copper |
| Connection type | 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 | 9 … 10 mm / 0.35 … 0.39 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 |
| Pluggable connector | pluggable |


Continued on next page

## Material data

| | |
|---|---|
| Color | light gray |
| Housing material | Polycarbonate; polyamide 6.6 |
| Fire load | 1.049 MJ |
| Weight | 41.1 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 | Per IEC 60068-2-6 |
| Shock resistance | 15g per IEC 60068-2-27 |
| EMC immunity to interference | per EN 61000-6-2 |
| EMC emission of interference | per EN 61000-6-4 |
| 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 |
| GTIN | 4045454504656 |
| Customs tariff number | 85437090990 |

## Product Classification

| | |
|---|---|
| UNSPSC | 32101602 |
| eCl@ss 10.0 | 27-24-26-01 |
| eCl@ss 9.0 | 27-24-26-01 |
| ETIM 9.0 | EC001596 |
| ETIM 10.0 | EC001596 |
| ECCN | NO US CLASSIFICATION |

## Environmental Product Compliance

| | |
|---|---|
| CAS-No. | 25550-51-0 |
| REACH Candidate List Substance | 4-Methyl-1,2-cyclohexanedicarboxylic anhydride |
| RoHS Compliance Status | Compliant,No Exemption |
| SCIP notification number (Austria) | d241b628-7bc4-44f2-9227-e02049fa0e4c |
| SCIP notification number (Belgium) | 9869f7f6-e7b9-40a9-abd1-9a12dd73ca67 |
| SCIP notification number (Bulgaria) | e3617d87-82c6-4cc9-89ec-376e84df3697 |
| SCIP notification number (Czech Republic) | 97ffa227-16cd-4283-b68f-1ab275dde78f |
| SCIP notification number (Denmark) | c2d997fb-5a07-4c70-a500-e3e5da23849f |
| SCIP notification number (Finland) | 6472b864-e0e4-4a54-89b9-62c345c66c09 |
| SCIP notification number (France) | d6234f01-d2e4-4f6d-8667-1c2e803da589 |
| SCIP notification number (Germany) | fa3c5c15-9ee3-4a30-8862-3b48852e2e2a |
| SCIP notification number (Hungary) | fb8488cd-a41c-445d-aac1-86a52d690ac3 |


Continued on next page

## Environmental Product Compliance

| | |
|---|---|
| SCIP notification number (Italy) | 993aa28a-0b14-4c8f-9b22-fb9c76ecdd38 |
| SCIP notification number (Netherlands) | 5ebe62bd-8985-4d72-8f27-72ba2dc13946 |
| SCIP notification number (Poland) | d59442a9-69b2-42c0-b1d4-815f2954c3c6 |
| SCIP notification number (Romania) | f752fda9-e9f6-45d6-9189-95659303ab14 |
| SCIP notification number (Sweden) | 7d38fe5b-cd9d-4ee9-8d43-21951fa20249 |

## Approvals / Certificates

### General approvals

| Approval | Standard | Certificate Name |
|---|---|---|
| EAC<br>GZO Almaty Standart | TP TC 020/2011 | EAC CoC 03083 |
| KC<br>National Radio Research Agency | Article 58-2, Clause 3 | MSIP-REM-W43-AIM750 |
| UL<br>Underwriters Laboratories Inc. (ORDINARY LOCATIONS) | UL 508 | E175199 |

### Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|---|---|---|
| EU-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |
| UK-Declaration of Conformity<br>WAGO GmbH & Co. KG | - | - |

### Approvals for hazardous areas

| Approval | Standard | Certificate Name |
|---|---|---|
| ATEX<br>TUEV Nord Cert GmbH | EN 60079-0 | TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc) |
| CCCEx<br>CQST/CNEx | CNCA-C23-01 | 2020312310000213 (Ex ec 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 | TÜV 12.1297 X |
| UKEx<br>WAGO GmbH & Co. KG | EN 60079-0 | UKCA_WA GO22UKEX003X_ec |
| UL<br>Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | UL 121201 | E198726 |


Continued on next page

## Downloads

### Environmental Product Compliance

**Compliance Search**

Environmental Product Compliance 753-477

### Documentation

**Manual**

| | | |
|---|---|---|
| Product Manual 2-channel, 0-10V AC/DC, diff. | 5357529483 \| 2 \| en-US \| 2026-06-30 14:31 02.07.2026 | pdf 1461.75 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**

| | | |
|---|---|---|
| 753-477 | 19.02.2019 | xml 4.96 KB |
| 753-477 | 20.10.2017 | doc 28.50 KB |

**Instruction Leaflet**

| | | |
|---|---|---|
| CCC Ex (Additional information) | 26.04.2023 | pdf 159.76 KB |

### CAD/CAE-Data

**CAD data**

2D/3D Models 753-477

**CAE data**

EPLAN Data Portal 753-477

WSCAD Universe 753-477

ZUKEN Portal 753-477

## 1 Compatible Products

### 1.1 Required Accessories

#### 1.1.1 Pluggable connector

##### 1.1.1.1 Male connector/plug



Item No.: 753-110
Plug

## 1.2 Optional Accessories

### 1.2.1 DIN-rail

#### 1.2.1.1 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.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



Item No.: 210-114
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.: 210-112
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.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

### 1.2.2 Marking

#### 1.2.2.1 Group marker carrier



Item No.: 750-106
Group marker carrier

#### 1.2.2.2 Marker



Item No.: 750-100
Marker card; as a DIN A4 sheet; plain



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


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### 1.2.2.3 Marker carrier



Item No.: 750-103
Group marker carrier

### 1.2.3 Pluggable connector

### 1.2.3.1 Coding



Item No.: 753-150
753 Series coding elements

### 1.2.4 Shield termination

### 1.2.4.1 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

### 1.2.5 System enclosure

### 1.2.5.1 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