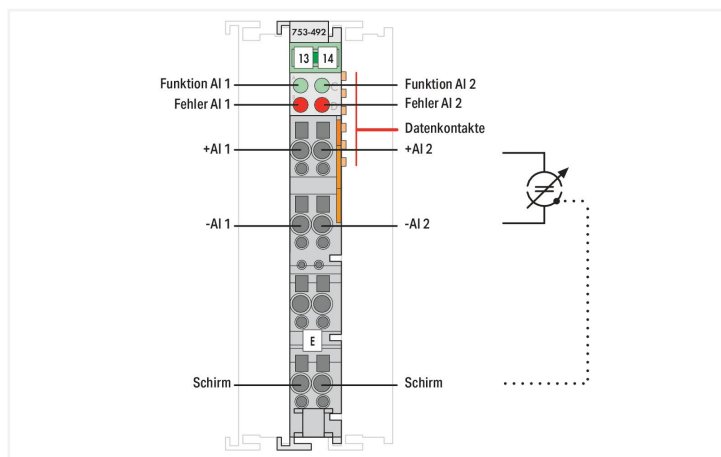
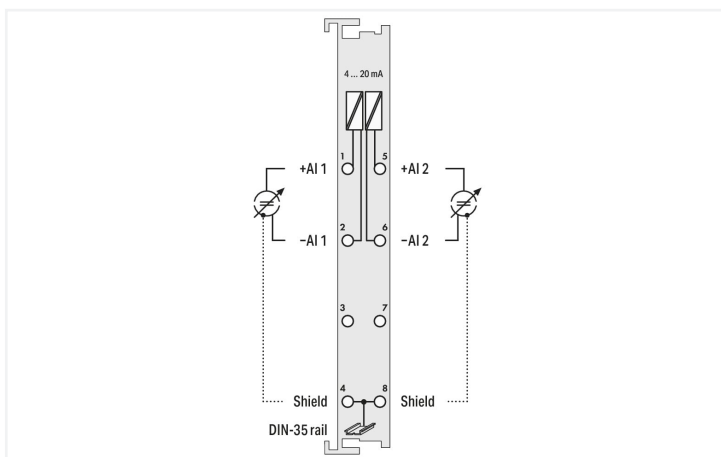
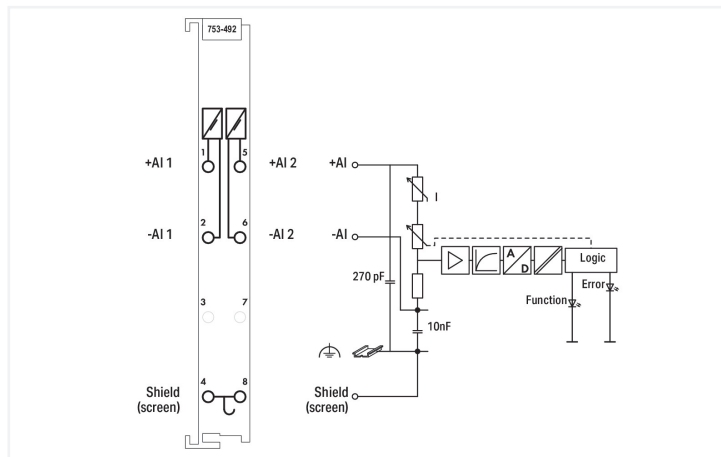


Data Sheet | Item Number: 753-492
2-channel analog input; 4 ... 20 mA; Differential input

<https://www.wago.com/753-492>



Color: ■ light gray



This analog input module processes differential signals ranging from 4 to 20 mA. The input signal of each channel is electrically isolated and is transmitted with a resolution of 13 bits. The system supply powers the module. The shield directly connects to the DIN-rail.

- Measured value acquisition: Time synchronous within the module
- Measurement range overflow/underflow: Status byte and LED
- Conversion method: SAR (Successive Approximation Register)
- Operating mode: Continuously sampling (default)
- Protection: Non-linear limiting

| 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 | Current |
| Signal type (current) | 4 ... 20 mADC |
| Sensor connection | 2 x (2-wire) |
| Input filter | Low pass (1st order), $f_G = 5 \text{ kHz}$ |
| Signal characteristics | Differential |
| Resolution [bit] | 13 bits |
| Operating mode | Continuously sampling (default) |
| Input resistance (max.) | 270 Ω |
| Data width | 2 x 16-bit data; 2 x 8-bit control/status (optional) |

Technical data

| | |
|--|---|
| Protection | Non-linear limiting |
| Admissible continuous overload | 30 V |
| Crosstalk attenuation | 80 dB |
| Monotonicity without error code | Yes |
| Measurement error (reference temperature) | 25 °C |
| Measurement error, deviation (max.) from the upper-range value | 0.05 % |
| Measurement error over entire temperature range | ≤ 0.4 % |
| Temperature error (max.) of the upper-range value | 0.01 %/K |
| Sampling duration | 5 µs |
| Sampling delay (channel/channel) | 1 µs |
| Sampling delay (module) | 1 ms |
| Sampling repetition time | 1 ms |
| Measurement range overflow/underflow | Status byte and LED |
| Measured value acquisition | Time synchronous within the module |
| Value of the least significant bit (LSB) | 2.4 µA |
| Conversion method | SAR (Successive Approximation Register) |
| Supply voltage (system) | 5 VDC; via data contacts |
| Current consumption (5 V system supply) | 80 mA |
| 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 |

Connection data

| | |
|---------------------------------------|--|
| Connection technology: inputs/outputs | 8 x CAGE CLAMP® |
| Connection type 1 | Inputs/outputs |
| Solid conductor | 0.08 ... 2.5 mm ² / 28 ... 14 AWG |
| Fine-stranded conductor | 0.08 ... 2.5 mm ² / 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 |

Material data

| | |
|--------------------|------------------------------|
| Color | light gray |
| Housing material | Polycarbonate; polyamide 6.6 |
| Fire load | 0.882 MJ |
| Weight | 56.5 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 (standing/lying); vertical |
| 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 ₂ S 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) |
| 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 pcs |
| Packaging type | Box |
| Country of origin | DE |
| GTIN | 4050821867500 |
| Customs tariff number | 85389099990 |

Environmental Product Compliance

| | |
|---|--|
| CAS-No. | 25550-51-0 7439-92-1 |
| REACH Candidate List Substance | 4-Methyl-1,2-cyclohexanedicarboxylic anhydride Lead |
| RoHS Compliance Status | Compliant,With Exemption |
| RoHS Exemption | 6(c) 7(a) 7(c)-I 7(c)-II |
| SCIP notification number (Austria) | 5ae56e80-a696-4b4a-a939-b05311cf35ae |
| SCIP notification number (Belgium) | f881196c-50c3-43be-82bd-f12705350164 |
| SCIP notification number (Bulgaria) | 72c06cec-bdfe-452a-9b2c-d09a552156b7 |
| SCIP notification number (Czech Republic) | 56c97b3d-60d6-40d5-83d3-b4cd22e58ea9 |
| SCIP notification number (Denmark) | c395fe2b-43cc-4886-997a-ef24c3b30e7f |
| SCIP notification number (Finland) | 3c292a96-baa4-43ba-94fe-878f4d9abe2a |
| SCIP notification number (France) | 3721ce6a-3df6-4818-970b-1cd98ccb8881 |
| SCIP notification number (Germany) | e6be9c17-20b7-4b8a-a341-9f0fb786110a |
| SCIP notification number (Hungary) | 10fb5efa-0706-4b41-87ef-b37e6751d07f |
| SCIP notification number (Italy) | cf0a15d-ad30-4f85-8d70-74ad69464ee8 |
| SCIP notification number (Netherlands) | 51d09eb0-20ed-4712-93f9-aa67cff1114f |
| SCIP notification number (Poland) | 829cce39-644d-47ef-882d-1fcb4cdb59c |
| SCIP notification number (Romania) | a18c533e-184b-4f50-84c6-c7a1fb3341ac |
| SCIP notification number (Sweden) | b5a8f48e-2f5d-48f0-a78a-0a2e1c5102d8 |

Approvals / Certificates

General 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 |
| UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS) | UL 508 | E175199 Sec.1 |

Declarations of conformity and manufacturer's declarations

| Approval | Standard | Certificate Name |
|----------|----------|------------------|
|----------|----------|------------------|

EU-Declaration of Conformity
WAGO GmbH & Co. KG

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) |
| 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 |
| UKEx WAGO GmbH & Co. KG | EN 60079-0 | UKCA_WA GO22UKEX003X_ec |
| UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | UL 121201 | E198726 Sec.1 |

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 753-492



Documentation

| Manual | | | |
|---------------------------------------|-----------------------|-------------------|-------------------|
| Product Manual 2-channel, 4-20mA | V 1.1.0 | pdf 1995.61 KB | ↓ |
| System Manual WAGO I/O System 750/753 | V 3.3.3 29.08.2023 | pdf 8512.61 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 | | | |
|----------|------------|-----------------|-------------------|
| 753-492 | 17.10.2017 | doc 30.00 KB | ↓ |
| 753-492 | 19.02.2019 | xml 5.13 KB | ↓ |

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

CAD/CAE-Data

| CAD data |
|----------------------|
| 2D/3D Models 753-492 |

| CAE data |
|---------------------------|
| EPLAN Data Portal 753-492 |
| WSCAD Universe 753-492 |
| ZUKEN Portal 753-492 |

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.: 210-508](#)
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-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.: 210-506](#)
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; 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.: 210-115](#)
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored

1.2.1.1 Mounting accessories



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.: 210-504

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; 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

Item No.: 210-505

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; 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

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