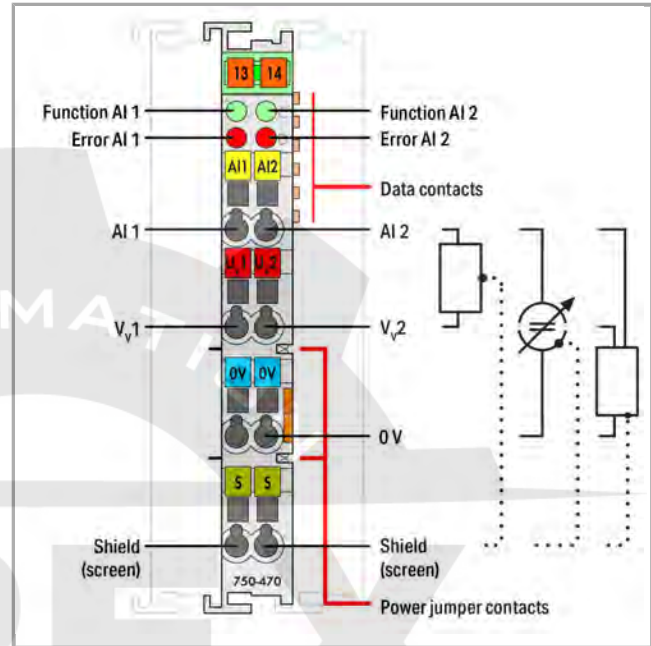
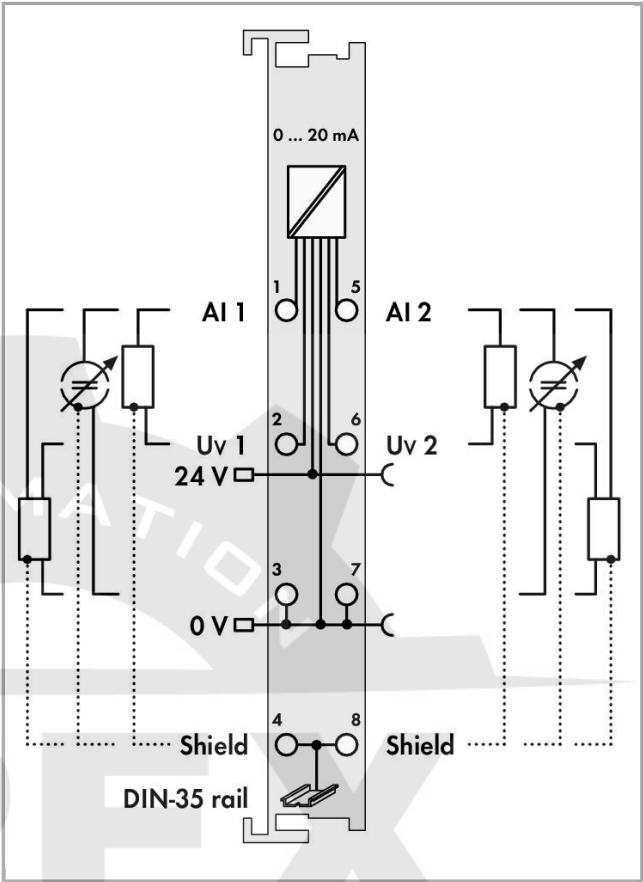
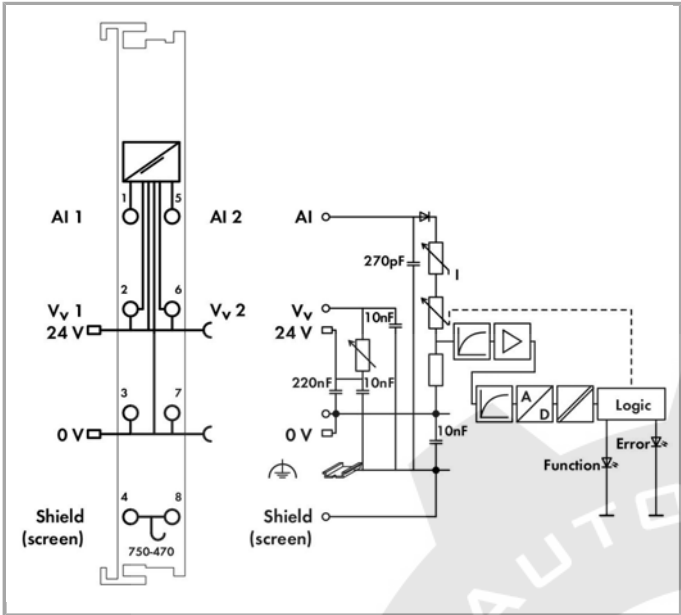




RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)



Item description

- The analog input module processes signals of a standard magnitude 0–20mA.
- The input signal is electrically isolated and is transmitted with a resolution of 12 bits.
- The 24V supply for the field is derived from the module's power jumper contacts.
- The shield (screen) is directly connected to the DIN rail.
- This module can supply the short-circuit-proof voltage for 2-wire transducers.
- A short circuit to power is indicated as an error/fieldbus failure and a message is sent to the supervisory control.

Data  
Technical Data

|                                   |                                |
|-----------------------------------|--------------------------------|
| Number of analog inputs           | 2                              |
| Total number of channels (module) | 2                              |
| Type of signal                    | Current                        |
| Type of signal current            | DC 0 ... 20 mA                 |
| Sensor connection                 | 2 x (2-conductor, 3-conductor) |
| Eingangsfrequenz analog           | 50 Hz                          |

|                                                     |                                                                                                                   |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Input voltage                                       | non-linear, overload protected $V = 1.2 V + 100 \Omega \times I_{\text{meas.}}$                                   |
| Signal characteristic                               | Single-ended                                                                                                      |
| Resolution [bit]                                    | 12 Bit                                                                                                            |
| Input resistance max.                               | 160 $\Omega$                                                                                                      |
| Bit width                                           | 2 x 16-bit data; 2 x 8-bit control/status (optional)                                                              |
| Noise rejection at sampling frequency               | -100 dB                                                                                                           |
| Noise rejection above sampling frequency            | -40 dB                                                                                                            |
| Conversion time (typ. $\leq$ )                      | 80 ms                                                                                                             |
| Messfehler, Bezugstemperatur                        | 25 °C                                                                                                             |
| Messfehler, Abweichung max. vom Messbereichsendwert | 0.1 %                                                                                                             |
| Temperaturfehler max. vom Messbereichsendwert       | 0.01 %/K                                                                                                          |
| System supply voltage                               | DC 5 V; via data contacts                                                                                         |
| Current consumption, system supply (5 V)            | 100 mA                                                                                                            |
| System and sensor supply voltage                    | )                                                                                                                 |
| Field supply voltage                                | DC 24 V (-25 ... +30 %); über Leistungskontakte (Einspeisung über Messerkontakt; Weiterleitung über Federkontakt) |
| Isolation                                           | 500 V system/supply                                                                                               |
| Number of incoming power jumper contacts            | 2                                                                                                                 |
| Number of outgoing power jumper contacts            | 2                                                                                                                 |

## Connection data

|                                    |                                              |
|------------------------------------|----------------------------------------------|
| Connection technology: In-/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              |

## Geometrical Data

|                                       |                      |
|---------------------------------------|----------------------|
| Width                                 | 12 mm / 0.472 inch   |
| Height                                | 69.8 mm / 2.748 inch |
| Height from upper-edge of DIN-35 rail | 62.6 mm / 2.465 inch |
| Depth                                 | 100 mm / 3.937 inch  |

## Mechanical data

|                  |             |
|------------------|-------------|
| Type of mounting | DIN-35 rail |
|------------------|-------------|

## Material Data

|                  |                              |
|------------------|------------------------------|
| Color            | light gray                   |
| Housing material | Polycarbonate, polyamide 6.6 |
| Fire load        | 1.237 MJ                     |

|                    |      |
|--------------------|------|
| Weight             | 52 g |
| Conformity marking | 1    |

## Environmental Requirements

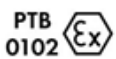
|                                                                                    |                                           |
|------------------------------------------------------------------------------------|-------------------------------------------|
| Surrounding air (operating) temperature                                            | 0 ... 55 °C                               |
| Surrounding air (storage) temperature                                              | -40 ... 85 °C                             |
| Protection class                                                                   | IP20                                      |
| Degree of pollution (5)                                                            | 2 per IEC 61131-2                         |
| Operating altitude                                                                 | 0 ... 2000 m                              |
| Mounting position                                                                  | horizontal (standing/lying) or vertical   |
| Relative air humidity (no condensation)                                            | 95 %                                      |
| Vibration resistance                                                               | 4g per IEC 60068-2-6                      |
| Shock resistance                                                                   | 15g per IEC 60068-2-27                    |
| EMC immunity to interference                                                       | acc. to EN 61000-6-2, marine applications |
| EMC emission of interference                                                       | acc. to EN 61000-6-3, 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

|                    |                 |
|--------------------|-----------------|
| Product Group      | 15 (Remote I/O) |
| Country of origin  | DE              |
| GTIN               | 4050821866985   |
| Customs Tariff No. | 85389099990     |

## Approvals / Certificates

### Ex-Approvals

| Logo                                                                               | Approval                                                   | Additional Approval Text | Certificate name                  |
|------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------|-----------------------------------|
|  | ATEX<br>TUEV Nord Cert GmbH                                | EN 60079-0               | TÜV 07<br>ATEX<br>554086 X<br>en. |
|  | TUEV Nord<br>TUEV Nord Cert GmbH                           | IEC 60079-0              | IECEx<br>TUN<br>09.0001 X         |
|  | UL<br>Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | ANSI/ISA 12.12.01        | E198726<br>Sec.1                  |

## Country specific Approvals

| Logo                                                                             | Approval                             | Additional Approval Text | Certificate name            |
|----------------------------------------------------------------------------------|--------------------------------------|--------------------------|-----------------------------|
|  | KC<br>National Radio Research Agency | Article 58-2, Clause 3   | MSIP-<br>REM-W43-<br>AIM750 |
|  | KC<br>National Radio Research Agency | Article 58-2, Clause 3   | MSIP-<br>REM-W43-<br>AIM750 |

## Ship Approvals

| Logo                                                                                | Approval                                         | Additional Approval Text        | Certificate name         |
|-------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------|--------------------------|
|     | ABS<br>American Bureau of Shipping               | -                               | 19-<br>HG1821926         |
|   | ABS<br>American Bureau of Shipping               | Rules for class. of Steel Ships | 16-<br>HG1554285-<br>PDA |
|  | BV<br>Bureau Veritas S.A.                        | -                               | 13453/DO BV              |
|   | DNV GL<br>Det Norske Veritas, Germanischer Lloyd | -                               | TAA0000194               |
|   | KR<br>Korean Register of Shipping                | -                               | HMB05880-<br>AC001       |
|  | LR<br>Lloyds Register                            | -                               | 02/20026 (E5)            |
|   | NK<br>Nippon Kaiji Kyokai                        | -                               | TA17255M                 |
|                                                                                     | PRS                                              | -                               | TE/2236                  |



Polski Rejestr Statków

/880590/19



RINA  
RINA Germany GmbH

ELE134212XG

## UL-Approvals

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

## Compatible products

## system box

|                                                                                    |                                                                                                                                     |         |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 850-804</b><br>IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip         | 850-804 |
|  | <b>Item no.: 850-804/000-001</b><br>IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip | 850-804 |
|  | <b>Item no.: 850-805</b><br>IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip         | 850-805 |
|  | <b>Item no.: 850-814/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate            | 850-814 |
|  | <b>Item no.: 850-815/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate            | 850-815 |
|  | <b>Item no.: 850-816/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate            | 850-816 |
|  | <b>Item no.: 850-817/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate            | 850-817 |
|  | <b>Item no.: 850-825</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20                          | 850-825 |

**Item no.: 850-826**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

850-826

**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

/002-000

850-826

**Item no.: 850-827**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

850-827

**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

/002-000

850-827

**Item no.: 850-828**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip

850-828

**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

/002-000

850-828

**Item no.: 850-834**

IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20

850-834

**Item no.: 850-835**

IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

850-835

**Item no.: 850-836**

IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip

850-836

**Supply module****Item no.: 750-601**

Power Supply; 24 VDC

750-601

**Item no.: 750-602**

Power Supply; 24 VDC

750-602

**Item no.: 750-610**

Power Supply; 24 VDC; fuse holder; Diagnostics

750-610

**Item no.: 750-612**

Power Supply; 0 ... 230 V AC/DC

750-612

**Carrier rail****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

210-112

**Item no.: 210-113**

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

210-113

**Item no.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

210-114

**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

210-115

|                                                                                  |                                                                                                                                 |         |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------|
|  | <b>Item no.: 210-118</b><br>Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715            | 210-118 |
|  | <b>Item no.: 210-196</b><br>Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715          | 210-196 |
|  | <b>Item no.: 210-197</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715                | 210-197 |
|  | <b>Item no.: 210-198</b><br>Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715           | 210-198 |
|  | <b>Item no.: 210-504</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715   | 210-504 |
|  | <b>Item no.: 210-505</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715 | 210-505 |
|  | <b>Item no.: 210-506</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715  | 210-506 |
|  | <b>Item no.: 210-508</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715    | 210-508 |

## Marking accessories

|                                                                                    |                                                                                                                               |                      |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------------|
|    | <b>Item no.: 2009-145</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type         | 2009-145             |
|  | <b>Item no.: 2009-145/000-002</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-145<br>/000-002 |
|  | <b>Item no.: 2009-145/000-005</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-145<br>/000-005 |
|  | <b>Item no.: 2009-145/000-006</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-145<br>/000-006 |
|  | <b>Item no.: 2009-145/000-007</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-145<br>/000-007 |
|  | <b>Item no.: 2009-145/000-012</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-145<br>/000-012 |
|  | <b>Item no.: 2009-145/000-023</b><br>Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type  | 2009-145<br>/000-023 |
|  | <b>Item no.: 2009-145/000-024</b><br>Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | 2009-145<br>/000-024 |
|  | <b>Item no.: 248-501</b><br>Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card  | 248-501              |



**Item no.: 248-501/000-002**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-002

248-501



**Item no.: 248-501/000-005**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-005

248-501



**Item no.: 248-501/000-006**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-006

248-501



**Item no.: 248-501/000-007**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-007

248-501



**Item no.: 248-501/000-012**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-012

248-501



**Item no.: 248-501/000-017**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-017

248-501



**Item no.: 248-501/000-023**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-023

248-501



**Item no.: 248-501/000-024**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-024

248-501



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

750-100



**Item no.: 750-103**  
Group marker carrier

750-103



**Item no.: 750-106**  
Group marker carrier

750-106

#### shield connection



**Item no.: 790-108**  
Shield clamping saddle; 11 mm wide; diameter of compatible conductor

790-108



**Item no.: 790-116**  
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

790-116



**Item no.: 790-124**  
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm

790-124



**Item no.: 790-140**  
Shield clamping saddle; diameter of compatible conductor

790-140



**Item no.: 790-208**  
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

790-208



**Item no.: 790-216**  
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm

790-216



Item no.: 790-220

Shield clamping saddle; 30 mm wide; 6 ... 20 mm

790-220

## Downloads

## Documentation

## Manual

|                                                            |         |               |          |
|------------------------------------------------------------|---------|---------------|----------|
| 2-channel, 0-20mA, single-ended<br>short-circuit protected | V 1.1.0 | pdf<br>2.1 MB | Download |
|------------------------------------------------------------|---------|---------------|----------|

## Bid Text

|                       |             |                |          |
|-----------------------|-------------|----------------|----------|
| 750-470<br>IO-Klemmen | Oct 2, 2014 | doc<br>30.2 kB | Download |
|-----------------------|-------------|----------------|----------|

## Additional Information

|                                                          |         |                 |          |
|----------------------------------------------------------|---------|-----------------|----------|
| Disposal; Electrical and electronic equipment, Packaging | V 1.0.0 | pdf<br>265.8 kB | Download |
|----------------------------------------------------------|---------|-----------------|----------|

## System Description

|                                                                                    |         |               |          |
|------------------------------------------------------------------------------------|---------|---------------|----------|
| Design Notes<br>Basic conditions and recommendations for higher operational safety | V 2.0.0 | pdf<br>1.5 MB | Download |
|------------------------------------------------------------------------------------|---------|---------------|----------|

|                                                                                        |         |               |          |
|----------------------------------------------------------------------------------------|---------|---------------|----------|
| Use in Hazardous Environments<br>Term definition, marking and installation regulations | V 1.0.0 | pdf<br>1.0 MB | Download |
|----------------------------------------------------------------------------------------|---------|---------------|----------|

|                                                         |  |               |          |
|---------------------------------------------------------|--|---------------|----------|
| 750/753 Series I/O-System – General Product Information |  | pdf<br>1.7 MB | Download |
|---------------------------------------------------------|--|---------------|----------|

|                                           |  |                 |          |
|-------------------------------------------|--|-----------------|----------|
| Overview on WAGO-I/O-SYSTEM 750 approvals |  | pdf<br>780.2 kB | Download |
|-------------------------------------------|--|-----------------|----------|

## CAD/CAE - Smart Data

## CAD data

|                     |  |     |          |
|---------------------|--|-----|----------|
| 3D Download 750-470 |  | URL | Download |
|---------------------|--|-----|----------|

## Device Files

## Device Driver

|                                                               |                         |               |          |
|---------------------------------------------------------------|-------------------------|---------------|----------|
| WAGO USB Service Cable Driver / 750 and 857 Series<br>759-923 | 6.5.3.0<br>Sep 10, 2014 | zip<br>4.8 MB | Download |
|---------------------------------------------------------------|-------------------------|---------------|----------|

## Product family

### **750/753 Series I/O-System**

Learn more about the product family.

Show all products from the family



Subject to changes.

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