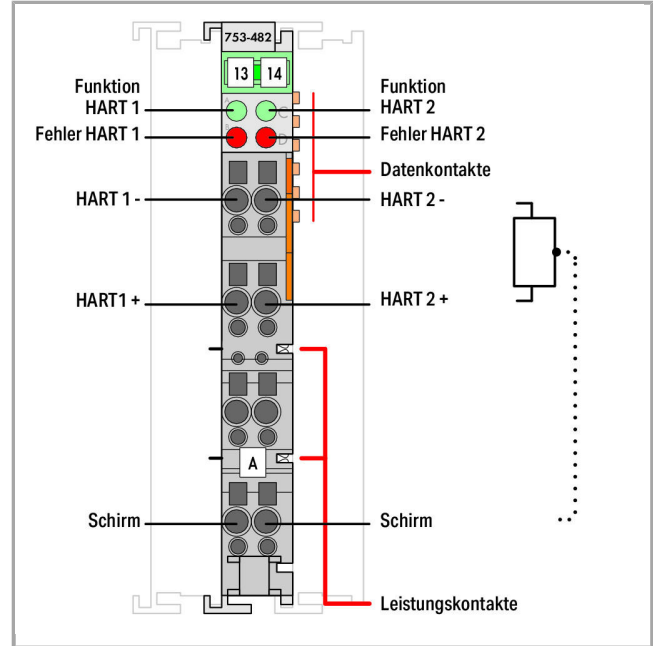
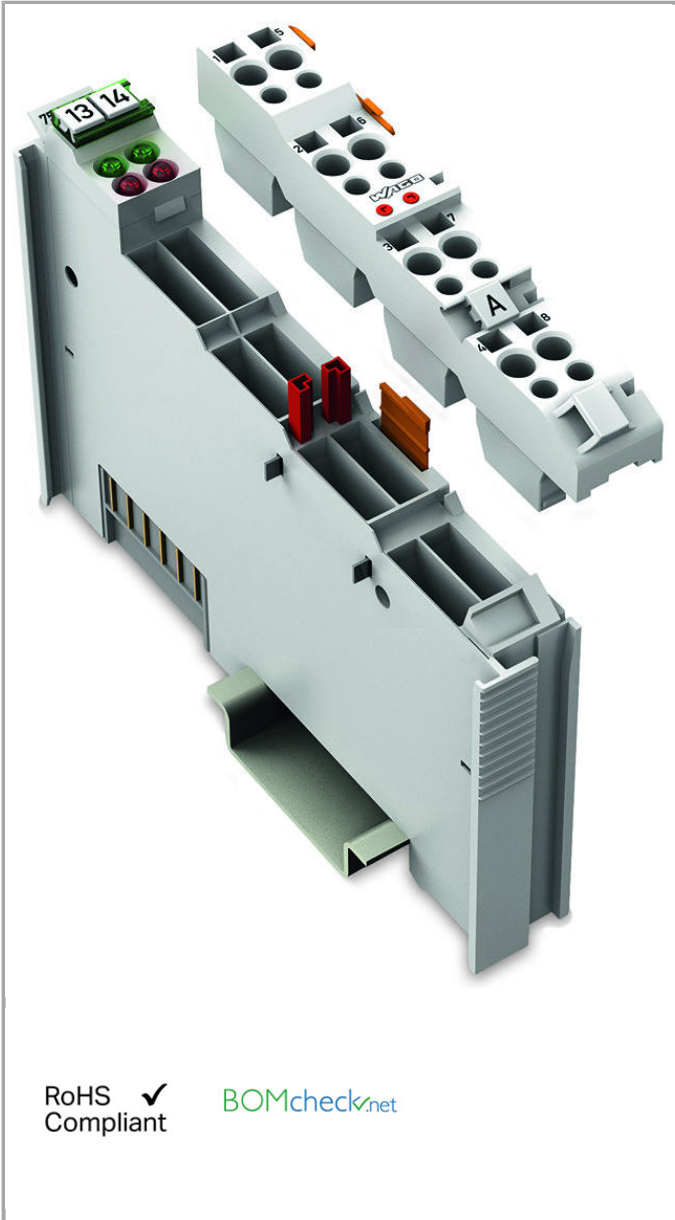
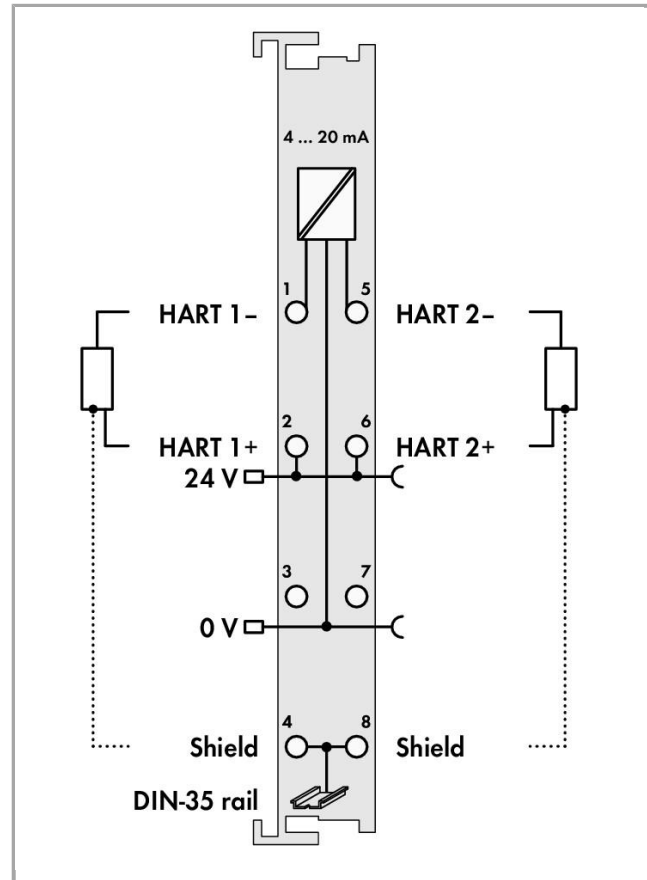
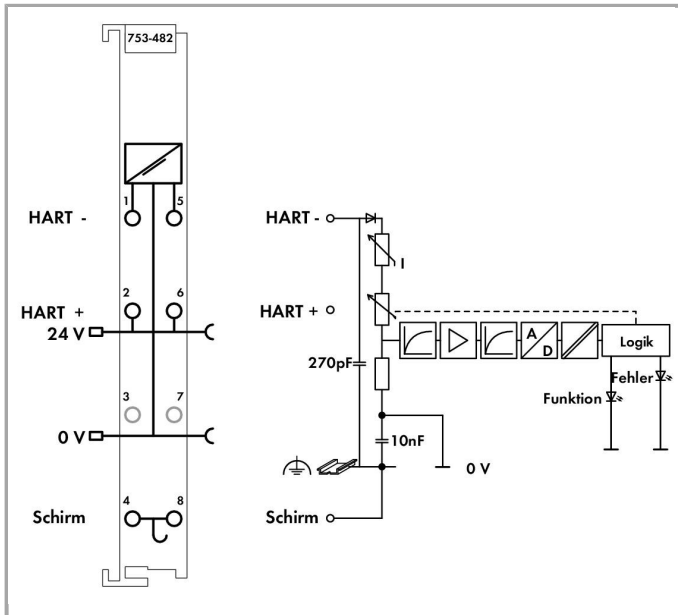


753-482



RoHS Compliant



### Item description

The analog input module powers the transducers, receives transmitted analog signals, and with electrical isolation, transmits the signals to the fieldbus.

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. At approx. 25mA, the overload protection switches the measurement input to a high-resistance state. Under normal operating conditions it will automatically switch back. This input module can supply the voltage for 2-wire transducers.

Up to 4 HART dynamic variables (PV, SV, TV, QV) per channel can be mapped in the cyclic process image of the coupler or controller (configurable). For HART communication with connected intelligent HART field devices, the HART protocol can be mapped in the cyclic process image of the coupler or controller (configurable).

FDT/DTM device drivers are available for select (programmable) couplers, allowing HART tool routing to the connected HART device.

### Note:

WAGO's 753 Series Pluggable Connectors and Coding Fingers are not included.

### Data

#### Technical Data

Number of analog inputs

2



|   |  |
|---|--|
| Total number of channels (module)                   | 2  |
| Type of signal                                      | Current  |
| Type of signal current                              | DC 4 ... 20 mA   |
| Sensor connection                                   | 2 x (2-conductor)  |
| Input filter  | parametrizable   |
| Input filter: parametrizable (channel by channel)   | yes  |
| Input voltage (max.)                                | 24V  |
| Input voltage drop                                  | ( $I_{\text{meas}} < 28 \text{ mA}$ ): not linear, as protected against overload $U = 0.9 \text{ V} + 270 \Omega \times I_{\text{meas}}$ |
| Signal characteristic                               | Single-ended   |
| Diagnostics   | Wire break, measurement range overflow   |
| Resolution [bit]                                    | 12 Bit   |
| Bit width   | 2 x 2-byte data; 2 x 2-byte data + 2n x 4-byte data (n = number of dynamic variables); 2 x 2-byte data + 6-byte mailbox                  |
| Overvoltage protection                              | 30 V, reverse polarity protected   |
| Conversion time (typ. $\leq$ )                      | 10 ms  |
| Messfehler, Bezugstemperatur                        | 25 °C  |
| Messfehler, Abweichung max. vom Messbereichsendwert | 0.1 %  |
| Temperaturfehler max. vom Messbereichsendwert       | 0.01 %/K   |
| Line break detection                                | $I_{\text{meas}} < 3.10 \text{ mA}$  |
| Short circuit detection                             | $I_{\text{meas}} > 22 \text{ mA}$  |
| System supply voltage                               | DC 5 V; via data contacts  |
| Current consumption, system supply (5 V)            | 65 mA  |
| System and sensor supply voltage                    | )  |
| Field supply voltage                                | DC 24 V (-25 ... +30 %); über Leistungskontakte (Einspeisung über Messerkontakt; Weiterleitung über Federkontakt)                        |
| HART devices per channel                            | 1 device (single-drop, no multi-drop)  |
| HART modems per channel                             | 1 modem (no multiplex)   |
| 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                       | 9 ... 10 mm / 0.35 ... 0.39 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 |
| Pluggable connector | yes         |

### Material Data

|                    |                              |
|--------------------|------------------------------|
| Color              | light gray                   |
| Housing material   | Polycarbonate, polyamide 6.6 |
| Weight             | 44.5 g                       |
| Conformity marking | 1                            |

### Environmental Requirements

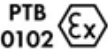


|  |   |
|--|---|
| Surrounding air (operating) temperature  | 0 ... 55 °C                             |
| Surrounding air (storage) temperature  | -40 ... 85 °C                           |
| Protection class   | IP20                                    |
| Degree of pollution (5)  | 2 per IEC 61131-2                       |
| Operating altitude   | 0 ... 2000 m                            |
| Mounting position  | horizontal (standing/lying) or vertical |
| Relative air humidity (no condensation)  | 95 %                                    |
| Vibration resistance   | acc. to IEC 60068-2-6                   |
| Shock resistance   | 15g per IEC 60068-2-27                  |
| EMC immunity to interference   | acc. to EN 61000-6-2                    |
| EMC emission of interference   | acc. to EN 61000-6-3                    |
| 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               | 4045454502683   |
| 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<br>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 |
















## UL-Approvals



















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



















## Compatible products














## Marking accessories

|  |  |          |
|--|--|----------|
|  | Item no.: 2009-145<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 | /000-002 | 2009-145 |
|    | <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 | /000-005 | 2009-145 |
|    | <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 | /000-006 | 2009-145 |
|    | <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 | /000-007 | 2009-145 |
|    | <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 | /000-012 | 2009-145 |
|    | <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  | /000-023 | 2009-145 |
|   | <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 | /000-024 | 2009-145 |
|  | <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  |
|  | <b>Item no.: 248-501/000-002</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-002 | 248-501  |
|  | <b>Item no.: 248-501/000-005</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-005 | 248-501  |
|  | <b>Item no.: 248-501/000-006</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-006 | 248-501  |
|  | <b>Item no.: 248-501/000-007</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-007 | 248-501  |
|  | <b>Item no.: 248-501/000-012</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-012 | 248-501  |
|  | <b>Item no.: 248-501/000-017</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-017 | 248-501  |
|  | <b>Item no.: 248-501/000-023</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type                      | /000-023 | 248-501  |

|  |   |                     |
|--|---|---------------------|
|    | <b>Item no.: 248-501/000-024</b><br>Mini-WSB marking card; as card; not stretchable; plain; snap-on type      | 248-501<br>/000-U24 |
|    | <b>Item no.: 709-198</b><br>Marking strips  | 709-198             |
|    | <b>Item no.: 750-100</b><br>Marker card; as a DIN A4 sheet; plain   | 750-100             |
|    | <b>Item no.: 750-103</b><br>Group marker carrier  | 750-103             |
|    | <b>Item no.: 750-106</b><br>Group marker carrier  | 750-106             |
| <b>pluggable wiring tier</b>   |   |                     |
|    | <b>Item no.: 753-110</b><br>Plug  | 753-110             |
|    | <b>Item no.: 753-150</b><br>753 Series coding elements  | 753-150             |
| <b>shield connection</b>   |   |                     |
|    | <b>Item no.: 790-108</b><br>Shield clamping saddle; 11 mm wide; diameter of compatible conductor              | 790-108             |
|  | <b>Item no.: 790-116</b><br>Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm | 790-116             |
|  | <b>Item no.: 790-124</b><br>Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm | 790-124             |
|  | <b>Item no.: 790-140</b><br>Shield clamping saddle; diameter of compatible conductor                          | 790-140             |
|  | <b>Item no.: 790-208</b><br>Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm                                  | 790-208             |
|  | <b>Item no.: 790-216</b><br>Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm                                 | 790-216             |
|  | <b>Item no.: 790-220</b><br>Shield clamping saddle; 30 mm wide; 6 ... 20 mm                                   | 790-220             |
| <b>Supply module</b>   |   |                     |
|  | <b>Item no.: 750-601</b><br>Power Supply; 24 VDC  | 750-601             |
|  | <b>Item no.: 750-602</b><br>Power Supply; 24 VDC  | 750-602             |
|  | <b>Item no.: 750-610</b><br>Power Supply; 24 VDC; fuse holder; Diagnostics                                    | 750-610             |
|  | <b>Item no.: 750-612</b><br>Power Supply; 0 ... 230 V AC/DC   | 750-612             |
|  | <b>Item no.: 753-602</b>  |                     |

|  |   |         |
|--|---|---------|
|    | Power Supply; 24 VDC  | 753-602 |
|    | Item no.: 753-612<br>Power Supply; 0 ... 230 V AC/DC  | 753-612 |
| <b>Carrier rail</b>  |   |         |
|    | Item no.: 210-112<br>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<br>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<br>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<br>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 |
|    | Item no.: 210-118<br>Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715                 | 210-118 |
|    | Item no.: 210-196<br>Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715               | 210-196 |
|   | Item no.: 210-197<br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715                     | 210-197 |
|  | Item no.: 210-198<br>Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715                | 210-198 |
|  | Item no.: 210-504<br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715        | 210-504 |
|  | Item no.: 210-505<br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715      | 210-505 |
|  | Item no.: 210-506<br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715       | 210-506 |
|  | Item no.: 210-508<br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715         | 210-508 |
| <b>system box</b>  |   |         |
|  | Item no.: 850-804<br>IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip          | 850-804 |
|  | Item no.: 850-804/000-001<br>IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip  | 850-804 |
|  | Item no.: 850-805<br>IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip          | 850-805 |
|  | Item no.: 850-814/002-000<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  |
|  |  | 7002-000 |
|    | <b>Item no.: 850-816/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate                 | 850-816  |
|  |  | 7002-000 |
|    | <b>Item no.: 850-817/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate                 | 850-817  |
|  |  | 7002-000 |
|    | <b>Item no.: 850-825</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20                               | 850-825  |
|    | <b>Item no.: 850-826</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip          | 850-826  |
|    | <b>Item no.: 850-826/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip  | 850-826  |
|  |  | 7002-000 |
|    | <b>Item no.: 850-827</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip          | 850-827  |
|   | <b>Item no.: 850-827/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip  | 850-827  |
|  |  | 7002-000 |
|  | <b>Item no.: 850-828</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip         | 850-828  |
|  | <b>Item no.: 850-828/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip | 850-828  |
|  |  | 7002-000 |
|  | <b>Item no.: 850-834</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20                               | 850-834  |
|  | <b>Item no.: 850-835</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip          | 850-835  |
|  | <b>Item no.: 850-836</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip          | 850-836  |

## Downloads

### Documentation

#### Manual

2-channel, 4-20mA, HART, single-ended

V 1.1.0

pdf  
1.6 MB

Download

#### Bid Text



|                    |             |                |          |
|--------------------|-------------|----------------|----------|
| 753-482<br>IO, 753 | Oct 6, 2014 | doc<br>32.3 kB | Download |
|--------------------|-------------|----------------|----------|

#### Additional Information

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

#### System Description

|   |  |                 |          |
|---|--|-----------------|----------|
| Overview on WAGO-I/O-SYSTEM 750 approvals               |  | pdf<br>780.2 kB | Download |
| 750/753 Series I/O-System – General Product Information |  | pdf<br>1.7 MB   | Download |

#### Application Notes

##### Application Note e!COCKPIT

|   |                       |               |          |
|---|-----------------------|---------------|----------|
| HART Toolrouting über Ethernet mit 750-820x und eRUNTIME (a116130)<br>Der Anwendungshinweis beschreibt die Einrichtung von Asset-Management-Systemen, welche das einfache, effiziente und schnelle Konfigurieren von HART-Feldgeräten ermöglichen. Am Beispiel des Cerabar PMC51 (Endress+Hauser) erfolgt die Anbindung an die WAGO-ETHERNET-Controller 750-820x (e!RUNTIME). Hierbei wird das HART-Modul 750-482 und 750-484 genutzt. Zusätzlich wird die Konfiguration der Asset-Management-Software WAGOframe, PACTware und FieldCare beschrieben. | 1.0.0<br>Mar 22, 2019 | pdf<br>2.9 MB | Download |
|---|-----------------------|---------------|----------|

##### Application Note CoDeSys 2.3

|  |                       |               |          |
|--|-----------------------|---------------|----------|
| HART-Tool-Routing über PROFIBUS mit 750-833 und 750-333 (a116140)<br>Der Anwendungshinweis beschreibt die Einrichtung von Asset-Management-Systemen, welche das einfache, effiziente und schnelle Konfigurieren von HART-Feldgeräten ermöglichen. Am Beispiel des Cerabar PMC51 (Endress+Hauser) erfolgt die Anbindung des HART-Sensors an den WAGO-PROFIBUS-Controller (750-833) bzw. WAGO-PROFIBUS-Koppler (750-333). Der zyklische PROFIBUS-Master (750-8208) koordiniert den Profibus-Feldbus. Über den TH LINK PROFIBUS (azyklischer Profibus Master) können die Asset-Management-Anwendungen (WAGOframe, PACTware und FieldCare) azyklisch über das HART-Modul (750-482 bzw. 750-484) auf die HART-Feldgeräte zugreifen. | 1.0.0<br>Mar 22, 2019 | pdf<br>5.3 MB | Download |
| HART-Tool-Routing über ETHERNET mit 750-820x/750-88x und CoDeSys 2.3 (a116120)<br>Der Anwendungshinweis beschreibt die Einrichtung von Asset-Management-Systemen, welche das einfache, effiziente und schnelle Konfigurieren von HART-Feldgeräten ermöglichen. Am Beispiel des Cerabar PMC51 (Endress+Hauser) erfolgt die Anbindung an die WAGO-ETHERNET-Controller 750-820x/750-88x (CoDeSys 2.3). Hierbei wird das HART-Modul 750-482 und 750-484 genutzt. Zusätzlich wird die Konfiguration der Asset-Management-Software WAGOframe, PACTware und FieldCare beschrieben.  | 1.0.0<br>Mar 22, 2019 | pdf<br>3.9 MB | Download |



## CAD/CAE - Smart Data

### CAD data

|                     | URL | Download |
|---------------------|-----|----------|
| 3D Download 753-482 |     |          |

## Device Files

### Device Driver

|   |                           |                |          |
|---|---------------------------|----------------|----------|
| ModbusTCP/HARTGatewayDTM for 75x-482/-484 2AI 4..20mA HART module   | 1.00.0000<br>Aug 20, 2015 | zip<br>21.5 MB | Download |
| 759-360; Profibus/HART GatewayDTM for 75x-482/-484 2AI 4..20mA HART module<br>When using the 750-333 PROFIBUS DP/V1 Coupler or 750-833 PROFIBUS Controller<br>and the 759-360 PROFIBUS/HART Gateway DTM, FDT tool routing is possible to the<br>DTM of the connected HART device. | 1.1.0.7<br>Aug 20, 2015   | zip<br>4.6 MB  | Download |

### Device Description File

|   |                     |                 |          |
|---|---------------------|-----------------|----------|
| EDD file for SIMATIC PDM for 750-333, 750-833, 750-482, 750-484 | 1.0<br>Nov 22, 2010 | zip<br>185.2 kB | Download |
|---|---------------------|-----------------|----------|

## Product family

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

[Learn more about the product family.](#)

[Show all products from the family](#)

Subject to changes.