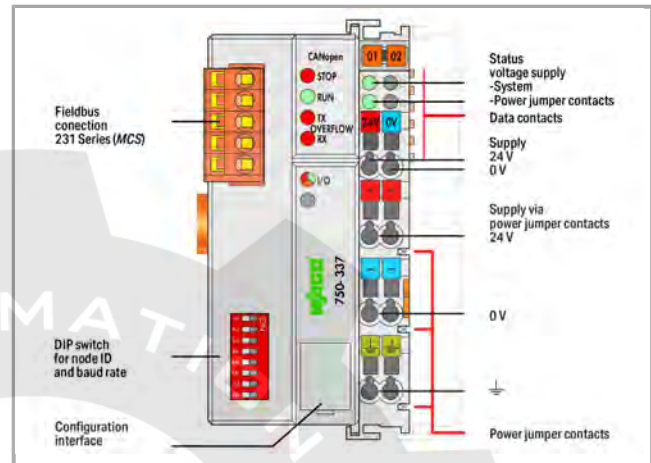
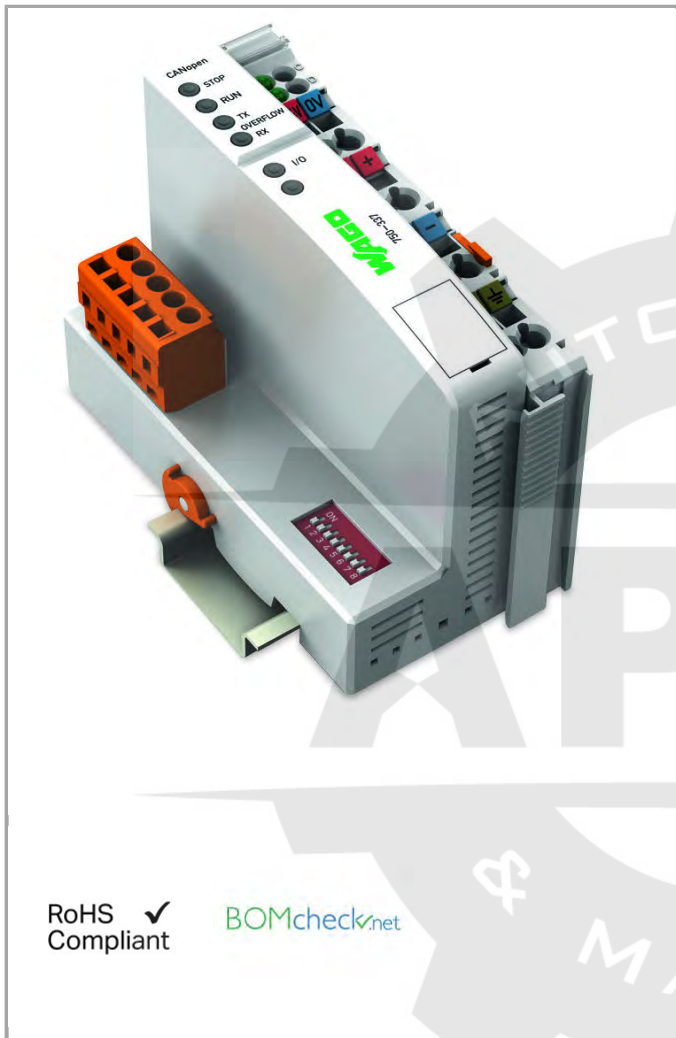
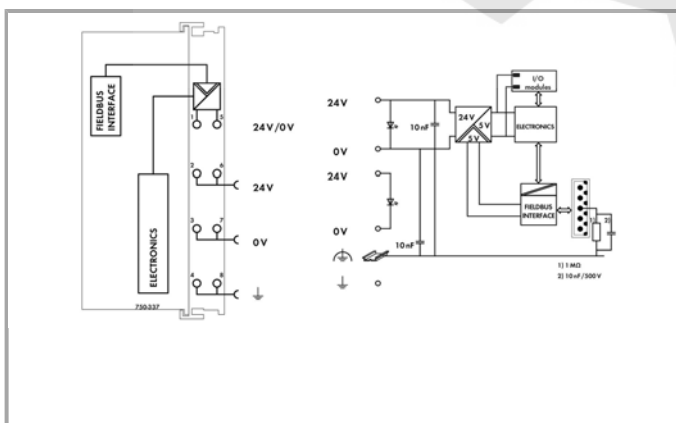
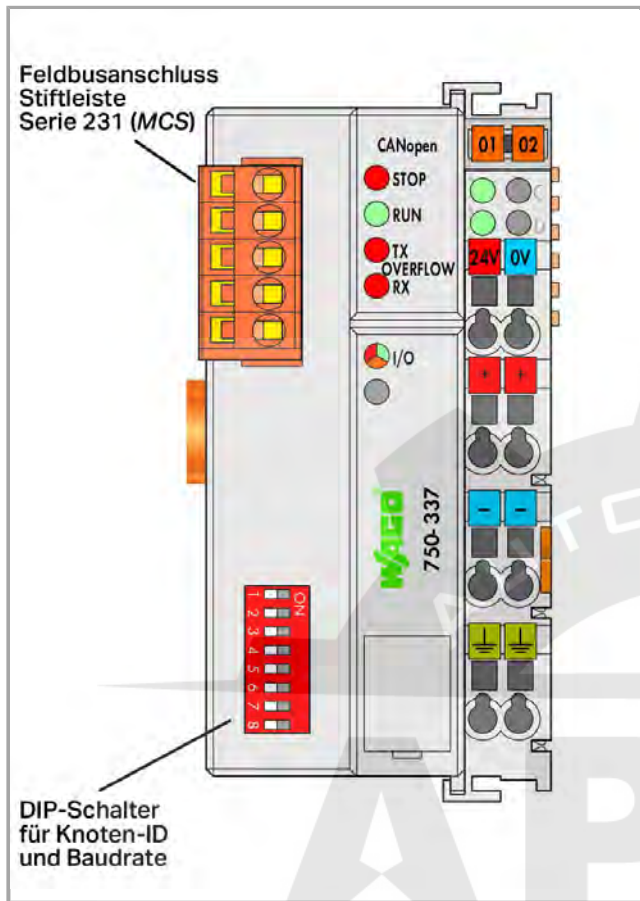




RoHS  
Compliant

BOMcheck.net





### Item description

This buscoupler connects the WAGO-I/O-SYSTEM as a slave to the CANopen fieldbus. The module data is transmitted using PDOs and SDOs.

The buscoupler automatically configures, creating a local process image which may include analog, digital or specialty modules. Analog and specialty module data is sent via words and/or bytes, digital data is sent bit by bit.

The local process image is divided into two data zones containing the data received and the data to be sent. The process data can be sent via the CANopen fieldbus to the PLC, PC or NC for further processing, and received from the field via CANopen.

The data of the analog modules is stored in the PDOs according to the order in which the modules are connected to the buscoupler. The bits of the digital modules are sent byte by byte and also mapped in the PDOs. If the amount of digital information exceeds 8 bits, the buscoupler automatically starts with a new byte.

All entries of the object dictionary can be mapped - as the user likes - in the 32 Rx PDOs and 32 Tx PDOs.

The complete input and output process image can be transmitted using SDOs.

"Spacer modules" can be set via software.

### Note:

Notice: EDS files required

## Data

## Technical Data

|                                                              |                                                                                                                                |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Communication                                                | CANopen                                                                                                                        |
| Number of fieldbus nodes on the master max.                  | 110                                                                                                                            |
| Baud rate                                                    | 10 kBd ... 1 MBd                                                                                                               |
| Fieldbus segment length max.                                 | 1000 m                                                                                                                         |
| Transmission medium                                          | Shielded Cu cable 3 x 0.25 mm <sup>2</sup>                                                                                     |
| Number of modules per node max.                              | 64                                                                                                                             |
| Other CANopen features                                       | NMT slave<br>Minimum boot-up<br>Variable PDO mapping<br>Emergency message<br>Life guarding<br>Configuration of virtual modules |
| No. of PDOs                                                  | 32 Tx / 32 Rx                                                                                                                  |
| No. of SDOs                                                  | 2 server SDOs                                                                                                                  |
| COB ID distribution                                          | SDO, standard                                                                                                                  |
| Node ID distribution                                         | DIP switches                                                                                                                   |
| Communication profile                                        | DS-301 V4.1                                                                                                                    |
| Device profile                                               | DS 401 V2.0<br>Marginal check<br>Edge-triggered PDOs<br>Programmable error response                                            |
| Input and output process image (Fieldbus) max.               | 512 Byte/512 Byte                                                                                                              |
| System supply voltage                                        | DC 24 V(-25 ... +30 %); via wiring level (CAGE CLAMP <sup>®</sup> connection)                                                  |
| Current consumption, system supply (5 V)                     | 350 mA                                                                                                                         |
| Total current for system supply                              | 1650 mA                                                                                                                        |
| Field supply voltage                                         | DC 24 V (-25 ... +30 %); via power jumper contacts                                                                             |
| Input current typ. at rated load (24 V)                      | 500 mA                                                                                                                         |
| Efficiency of the power supply (typ.) at nominal load (24 V) | 87 %                                                                                                                           |
| Isolation                                                    | 500 V system/supply                                                                                                            |
| Number of outgoing power jumper contacts                     | 3                                                                                                                              |
| Current carrying capacity of the power jumper contacts       | 10 A                                                                                                                           |

## Connection data

|                                               |                                              |
|-----------------------------------------------|----------------------------------------------|
| Connection technology: communication/fieldbus | CANopen: 1 x 5-pole male connector           |
| Connection technology: field supply           | 6 x CAGE CLAMP <sup>®</sup>                  |
| Connection technology: system supply          | 2 x CAGE CLAMP <sup>®</sup>                  |
| Connection technology: Device configuration   | 1 x 4-pole male connector                    |
| Connection type (1)                           | System/field supply                          |
| 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                                 | 50.5 mm / 1.988 inch |
| Height                                | 71.1 mm / 2.799 inch |
| Height from upper-edge of DIN-35 rail | 63.9 mm / 2.516 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          | 3.006 MJ                     |
| Weight             | 184 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 61000-6-4, 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                                    |

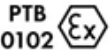
## Commercial data

|                   |                 |
|-------------------|-----------------|
| Product Group     | 15 (Remote I/O) |
| Country of origin | DE              |

|                    |               |
|--------------------|---------------|
| GTIN               | 4045454526900 |
| Customs Tariff No. | 85176200000   |

## Approvals / Certificates

### Ex-Approvals

| Logo                                                                             | Approval                                                          | Additional Approval Text | Certificate name                  |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------|-----------------------------------|
|  | <b>ATEX</b><br>TUEV Nord Cert GmbH                                | EN 60079-0               | TÜV 07<br>ATEX<br>554086 X<br>en. |
|  | <b>TUEV Nord</b><br>TUEV Nord Cert GmbH                           | IEC 60079-0              | IECEX<br>TUN<br>09.0001 X         |
|  | <b>UL</b><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            |
|------------------------------------------------------------------------------------|---------------------------------------------|--------------------------|-----------------------------|
|  | <b>KC</b><br>National Radio Research Agency | Article 58-2, Clause 3   | MSIP-<br>REM-W43-<br>FBC750 |
|  | <b>KC</b><br>National Radio Research Agency | Article 58-2, Clause 3   | MSIP-<br>REM-W43-<br>FBC750 |

### Ship Approvals

| Logo                                                                               | Approval                                  | Additional Approval Text        | Certificate name         |
|------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------|--------------------------|
|  | <b>ABS</b><br>American Bureau of Shipping | -                               | 19-<br>HG1821926         |
|  | <b>ABS</b><br>American Bureau of Shipping | Rules for class. of Steel Ships | 16-<br>HG1554285-<br>PDA |
|                                                                                    | <b>BV</b><br>Bureau Veritas S.A.          | -                               | 13453/DO BV              |

**DNV GL**

Det Norske Veritas, Germanischer Lloyd

-

TAA0000194

**LR**

Lloyds Register

-

02/20026 (E5)

**NK**

Nippon Kaiji Kyokai

-

TA17255M

**PRS**

Polski Rejestr Statków

-

TE/2236  
/880590/19**RINA**

RINA Germany GmbH

-

ELE134212XG

**UL-Approvals**

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

**Compatible products****General accessories**

|                                                                                    |                                                                                     |                     |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------|
|  | <b>Item no.: 750-921</b><br>Bluetooth® Adapter                                      | 750-921             |
|  | <b>Item no.: 750-923</b><br>Configuration cable; USB connector; Length: 2.5 m       | 750-923             |
|  | <b>Item no.: 750-923/000-001</b><br>Configuration cable; USB connector; Length: 5 m | 750-923<br>/000-001 |

## 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 | /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  |

**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

**system box****Item no.: 850-804**

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**

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip

/000-001

850-804

**Item no.: 850-805**

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**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

/002-000

850-814

**Item no.: 850-815/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

/002-000

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<br>/002-000 |
|    | <b>Item no.: 850-817/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate                 | 850-817<br>/002-000 |
|    | <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<br>/002-000 |
|    | <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<br>/002-000 |
|   | <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<br>/002-000 |
|  | <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             |
| <b>Carrier rail</b>                                                                |                                                                                                                                          |                     |
|  | <b>Item no.: 210-112</b><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             |
|  | <b>Item no.: 210-113</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715                      | 210-113             |
|  | <b>Item no.: 210-114</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715                       | 210-114             |
|  | <b>Item no.: 210-115</b><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             |
|  | <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 |

## Downloads

## Documentation

## Manual

|                                                                                                                                                            |         |               |          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------|----------|
| CANopen Fieldbus Coupler, MCS<br>10 kBaud -1 MBaud, digital and analog signals, MSS fieldbus connection / 10 kBaud<br>-1 MBaud, digital and analog signals | V 4.1.0 | pdf<br>8.6 MB | Download |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------------|----------|

## Bid Text

|                        |             |                |          |
|------------------------|-------------|----------------|----------|
| 750-337<br>IO, Koppler | Apr 4, 2012 | doc<br>31.7 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 |
| Use in Hazardous Environments<br>Term definition, marking and installation regulations | V 1.0.0 | pdf<br>1.0 MB   | Download |
| Design Notes<br>Basic conditions and recommendations for higher operational safety     | V 2.0.0 | pdf<br>1.5 MB   | Download |
| 750/753 Series I/O-System – General Product Information                                |         | pdf<br>1.7 MB   | Download |



## Runtime Software

### Firmware

|                                                 |                    |                 |          |
|-------------------------------------------------|--------------------|-----------------|----------|
| Firmware: 750-337 Fieldbus Coupler CANopen; MCS | 23<br>Mar 28, 2019 | zip<br>678.2 kB | Download |
|-------------------------------------------------|--------------------|-----------------|----------|

## CAD/CAE - Smart Data

### CAD data

|                     |     |          |
|---------------------|-----|----------|
| 3D Download 750-337 | URL | Download |
|---------------------|-----|----------|

## Device Files

### Device Description File

|                                                         |                   |               |          |
|---------------------------------------------------------|-------------------|---------------|----------|
| 750-914; EDS file for CANopen / 750, 752 and 767 Series | XQ<br>Dec 1, 2015 | zip<br>1.7 MB | Download |
|---------------------------------------------------------|-------------------|---------------|----------|

### 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.