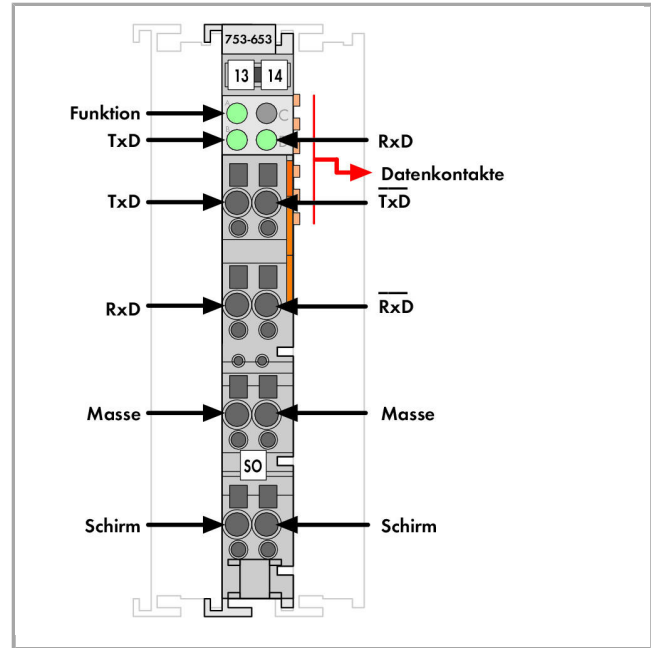
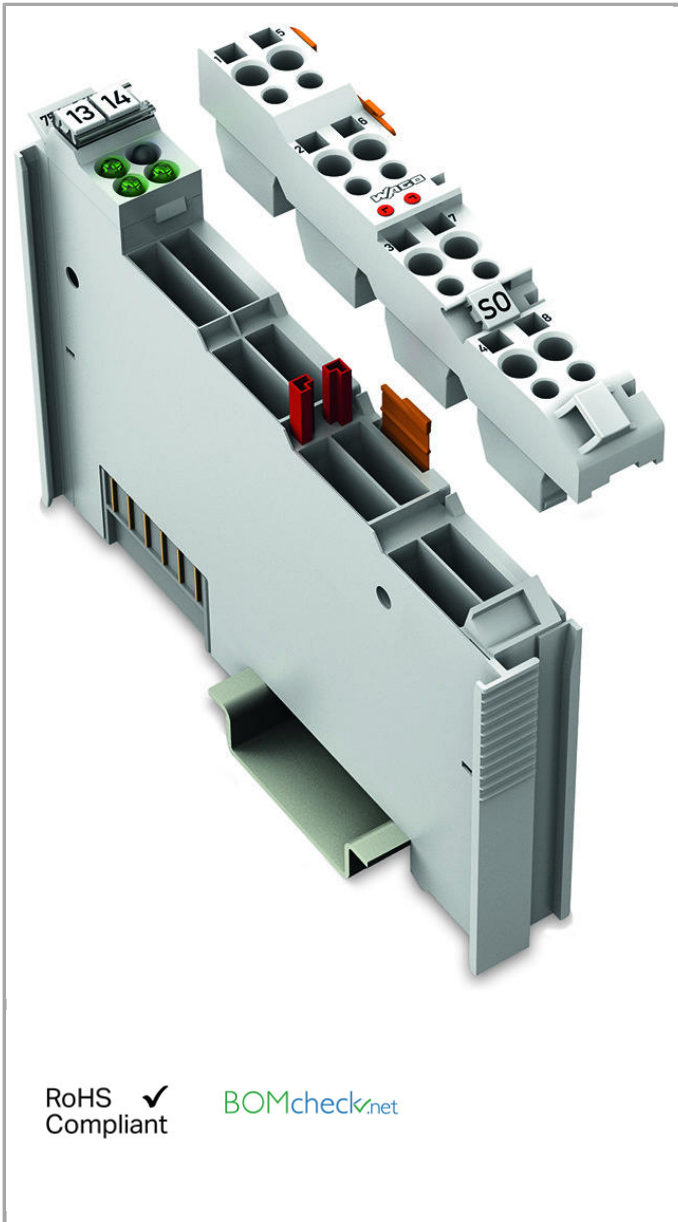
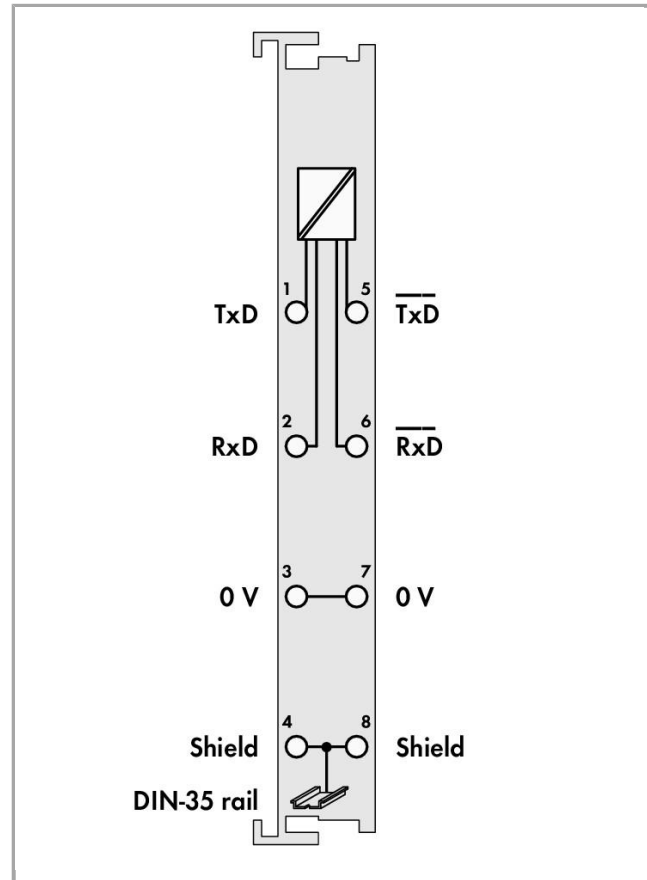
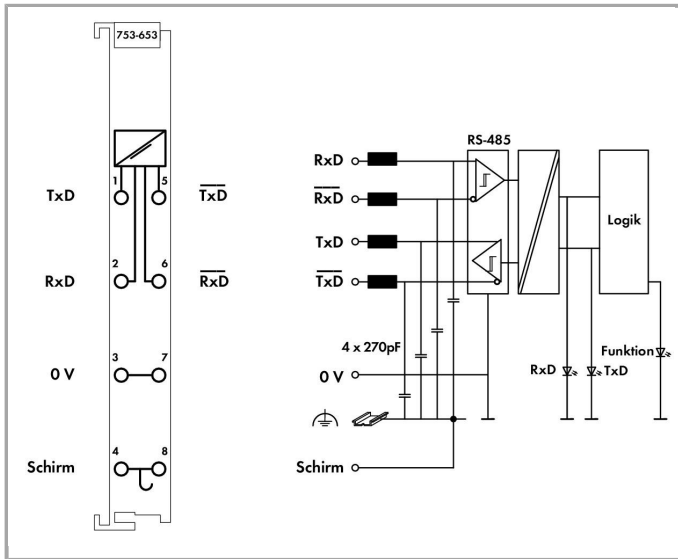


753-653



RoHS Compliant



Item description

This serial interface I/O module connects to RS-485 interface devices.

The interface operates in accordance with the TIA/EIA-485-A, DIN 66259 standard.

The connected device communicates directly with the control unit via the fieldbus coupler. The active communication channel works independent of the higher-level fieldbus system and allows full duplex operation up to 9600 baud.

The RS-485 interface guarantees high interference immunity via electrically isolated signals.

The shield (screen) is directly connected to the DIN-rail.

Note:

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

Data

Technical Data

| | |
|----------------|--------------------------|
| Type of signal | RS-422/-485 |
| Baud rate | 9.6 kBd |
| Bit transfer | ISO 8482 / DIN 66259 - 4 |



| | |
|--|--|
| Transmission channels | 1 TxD / 1 RxD, full duplex |
| Line length | approx. 1000 m twisted pair |
| Bit width | 1 x 24-bit input/output (3-byte user data); 1 x 8-bit control/status |
| Parity | None |
| Anzahl Datenbits | 8 |
| Stop bits | 1 |
| Buffer | 128 bytes in/16 bytes out |
| System supply voltage | DC 5 V; via data contacts |
| Current consumption, system supply (5 V) | 65 mA |
| System and sensor supply voltage |) |
| Isolation | 500 V system/supply |

Connection data

| | |
|------------------------------------|--|
| Connection technology: In-/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 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 |
| Fire load | 0.777 MJ |
| Weight | 40 g |
| Conformity marking | 1 |

Environmental Requirements

| | |
|---|---------------|
| Surrounding air (operating) temperature | 0 ... 55 °C |
| Surrounding air (storage) temperature | -40 ... 85 °C |

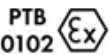


| | |
|--|---|
| Protection class | IP20 |
| Degree of pollution (5) | 2 per IEC 61131-2 |
| Operating altitude | 0 ... 2000 m |
| Mounting position | horizontal (standing/lying) or vertical |
| Relative air humidity (no condensation) | 95 % |
| Vibration resistance | 4g per IEC 60068-2-6 |
| Shock resistance | 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 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 (Remote I/O) |
| Country of origin | DE |
| GTIN | 4045454565268 |
| Customs Tariff No. | 85389099990 |

Approvals / Certificates

Ex-Approvals

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

Country specific Approvals


| Logo | Approval | Additional Approval Text | Certificate name |
|------|--------------------------------------|--------------------------|-----------------------------|
| | KC National Radio Research Agency | Article 58-2, Clause 3 | MSIP- REM-W43- SIM750 |



Ship Approvals
















| Logo | Approval | Additional Approval Text | Certificate name |
|---|---|--------------------------|-----------------------|
|  | ABS American Bureau of Shipping | - | 19- HG1821926 |
|  | BV Bureau Veritas S.A. | - | 13453/DO BV |
|  | DNV GL Det Norske Veritas, Germanischer Lloyd | - | TAA0000194 |
|  | KR Korean Register of Shipping | - | HMB05880- AC001 |
|  | LR Lloyds Register | - | 02/20026 (E5) |
|  | PRS Polski Rejestr Statków | - | TE/2236 /880590/19 |
|  | RINA RINA Germany GmbH | - | ELE134212XG |

















UL-Approvals

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
















Compatible products













pluggable wiring tier

| | | |
|--|--|---------|
|  | Item no.: 753-110 Plug | 753-110 |
|  | Item no.: 753-150 753 Series coding elements | 753-150 |
| 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 |
|  | Item no.: 210-118 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 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 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 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 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 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 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 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715 | 210-508 |
| 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 | 850-804 /000-001 |
|  | 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 | 850-814 /002-000 |
|  | Item no.: 850-815/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate | 850-815 /002-000 |
|  | Item no.: 850-816/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate | 850-816 /002-000 |
|  | Item no.: 850-817/002-000 IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate | 850-817 /002-000 |
|  | Item no.: 850-825 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 | 850-826 /002-000 |
|  | 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 | 850-827 /002-000 |
|  | 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 | 850-828 /002-000 |
|  | 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 |

Marking accessories

| | | | |
|--|---|----------|----------|
|  | Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | | 2009-145 |
|  | Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-002 | 2009-145 |
|  | Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-005 | 2009-145 |
|  | Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-006 | 2009-145 |
|  | Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-007 | 2009-145 |
|  | Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-012 | 2009-145 |
|  | Item no.: 2009-145/000-023 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-023 | 2009-145 |
|  | Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type | /000-024 | 2009-145 |
|  | Item no.: 248-501 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 | 248-501 |
| | | 7000-023 |
|  | Item no.: 248-501/000-024 Mini-WSB marking card; as card; not stretchable; plain; snap-on type | 248-501 |
| | | 7000-024 |
|  | Item no.: 709-198 Marking strips | 709-198 |
|  | 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

| | | | |
|-------------------------|---------|-----------------|----------|
| RS-485 Serial Interface | V 1.0.3 | pdf 441.3 kB | Download |
|-------------------------|---------|-----------------|----------|

Bid Text

| | | | |
|--------------------|-------------|----------------|----------|
| 753-653 IO, 753 | Oct 6, 2014 | doc 26.6 kB | Download |
|--------------------|-------------|----------------|----------|

Additional Information



Disposal; Electrical and electronic equipment, Packaging

V 1.0.0

pdf
265.8 kB

Download

System Description

750/753 Series I/O-System – General Product Information

pdf
1.7 MB

Download

Overview on WAGO-I/O-SYSTEM 750 approvals

pdf
780.2 kB

Download

CAD/CAE - Smart Data

CAD data

3D Download 753-653

URL

Download

Product family

750/753 Series I/O-System

Learn more about the product family.

Show all products from the family

Subject to changes.
