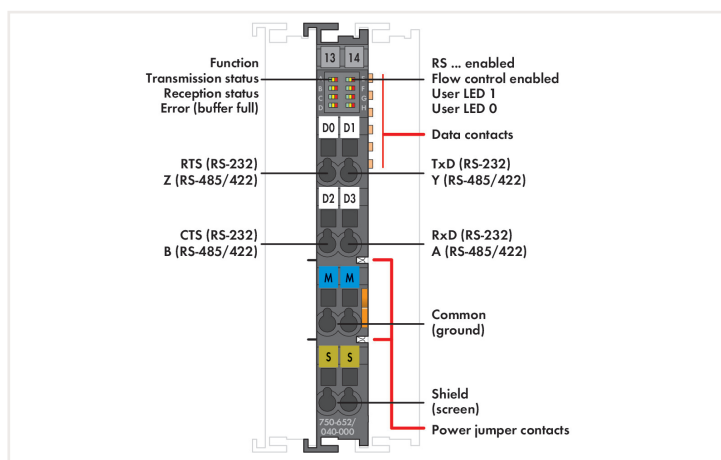
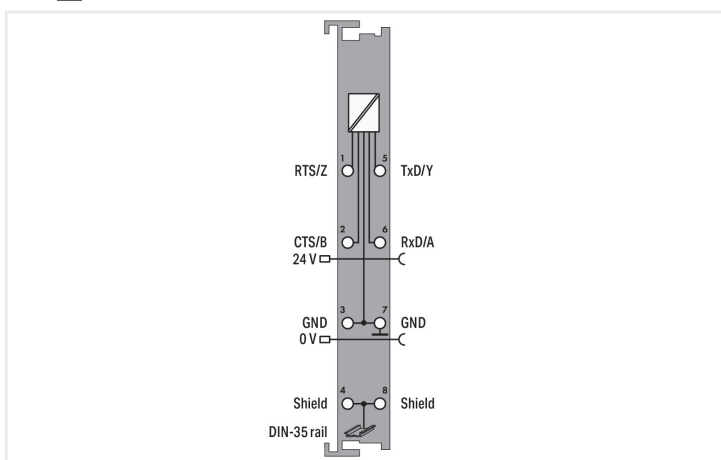
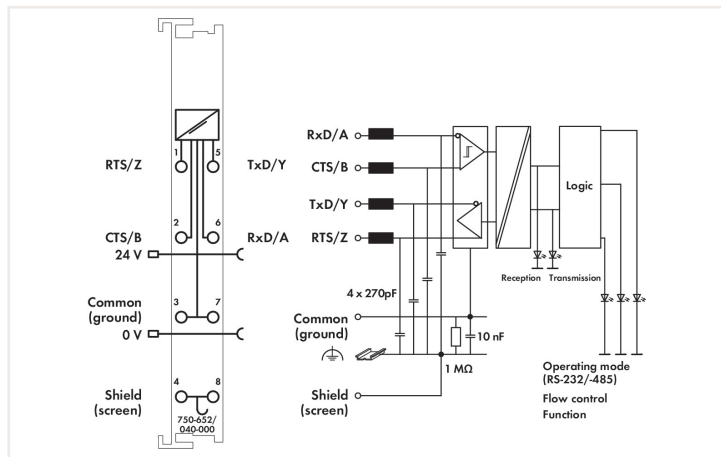




Color:  dark gray



This serial interface module connects RS-485, RS-422 or RS-232 interface devices to the WAGO I/O System 750. It also provides gateways between the serial interface and the fieldbus systems supported by the WAGO I/O System 750. No higher protocol level is required by the module. Communication to the associated fieldbus master is completely transparent, which provides a wide range of applications for the serial interface module. If required, communication protocols can be configured via fieldbus master.

The 2560-byte input buffer provides high data baud rates. At lower baud rates, the data received in lower priority tasks is evaluated without data loss.

The 512-byte output buffer provides fast transmission of larger data strings.

The module can be configured via WAGO-I/O-CHECK or GSD files. Both flexible baud rate and data width selection perfectly adapt to the application.

**The device is ideal for operation in extreme environments thanks to:**

- An extended temperature range
- Greater immunity to impulse voltages and electromagnetic interference
- Higher vibration and shock resistance

**Technical data**

Signal type	RS-232 RS-422 / RS-485
Baud rate	300 Bd ... 115.2 kBd
Bit transfer	RS-485/-422: ISO 8482 / DIN 66259 - 4; RS-232: EIA/TIA-232-F
Transmission channels	1 TxD / 1 RxD, full duplex, half duplex, 7- or 8-bit data, 1 or 2 stop bits
Line length	RS-485/-422: approx. 1000 m (max.), RS-232: 40 m (max.), data exchange mode/DMX: 100 m (max.) twisted-pair cable
Data width	8, 24 or 48 bytes (parameterizable)
Number of data bits	7/8, adjustable
Number of stop bits	1/2, adjustable
Buffer	2560 bytes for reception / 512 bytes for transmission
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	85 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact); Derating must be observed!

### Technical data

Rated surge voltage	1 kV
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A
Derating	Derating (supply voltage): Ambient temperatures under laboratory conditions: (-25 ... +30 %); for -40 ... +55 °C: 24 V (-25 ... +20 %); for +55 ... +70 °C: 24 V (-25 ... +10 %); Lower limit in all temperature ranges: -27.5 % (including 15 % residual ripple)

### Connection data

Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.25 ... 2.5 mm <sup>2</sup> / 24 ... 14 AWG
Fine-stranded conductor	0.25 ... 2.5 mm <sup>2</sup> / 24 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches

### Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	67.8 mm / 2.669 inches
Depth from upper-edge of DIN-rail	60.6 mm / 2.386 inches

### Mechanical Data

Mounting type	DIN-35 rail
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### Material Data

Color	dark gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.147 MJ
Weight	49 g
Conformity marking	CE

### Environmental requirements

Ambient temperature (operation)	-40 ... +70 °C
Surrounding air temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); 5000 m (max.)
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Relative humidity (with condensation)	Short-term condensation per Class 3K7/IEC EN 60721-3-3 and E-DIN 40046-721-3 (except for wind-driven precipitation, water and ice formation)
Vibration resistance	per IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155; EN 61373
Shock resistance	per IEC 60068-2-27 (15g/11 ms/half-sine/1,000 shocks; 25g/6 ms/1,000 shocks), EN 50155, EN 61373
EMC immunity to interference	per EN 61000-6-1, -2; EN 61131-2; marine applications; EN 50121-3-2; EN 50121-4, -5; EN 60255-26; EN 60870-2-1; EN 61850-3; IEC 61000-6-5; IEEE 1613; VDEW: 1994
EMC emission of interference	per EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, EN 50121-4, -5
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)
eCl@ss 10.0	27-24-26-08
eCl@ss 9.0	27-24-26-08
ETIM 8.0	EC001604
ETIM 7.0	EC001604
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821460398
Customs tariff number	85389099990

### Approvals and certificates

#### General approvals



Approval	Standard	Certificate name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	-	MSIP-REM-W43-SIM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 508	E175199 Sec.1

#### Approvals for marine applications



Approval	Standard	Certificate name
ABS American Bureau of Ship- ping	-	22-2208829-PDA
DNV DNV Germany GmbH	DNV-CG-0339, Aug.2021	TAA00000Y7
LR Lloyds Register	-	LR22276776TA
PRS Polski Rejestr Statków	-	TE/2215/880590/18

#### Approvals for hazardous areas



Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV 17 ATEX 193969X (II 3 G Ex ec IIC T4 Gc)
CCC CNEX	CNCA-C23-01	2020312310000214 (Ex ec IIC T4 Gc)
EAC Brjansker Zertifizierungs- stelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex e IIC T4 Gc X)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 16.0046X (Ex ec IIC T4 Gc)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	UL 121201	E198726 Sec.1

## Downloads

## Environmental Product Compliance

## Compliance Search

Environmental Product  
Compliance  
750-652/040-000





## Documentation



## Manual

Product Manual RS-232 / RS-485 freely configurable /XTR	V 1.3.0 16.08.2019	pdf 4099.67 KB	
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## System Description



Overview on WAGO-I/ O-SYSTEM 750 approvals	pdf 770.48 KB	
750 XTR Series I/O- System – General Pro- duct Information	pdf 726.09 KB	

## Bid Text

750-652/040-000	19.02.2019	xml 8.04 KB	
750-652/040-000	20.09.2017	doc 31.00 KB	

## Application Notes

## Application Note CoDeSys 2.3



Beispiel zur Verwen- dung der Bibliothek Modb_i05.lib (a102607)	V1.0.0 21.06.2011	zip 707.22 KB	
Application note Wago OBIS Protocol 01 (2019014)	2019-09-24 24.09.2019	zip 1110.17 KB	

## CAD/CAE-Data

## CAD data

2D/3D Models 750-652/040-000	
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## CAE data

EPLAN Data Portal 750-652/040-000	
WSCAD Universe 750-652/040-000	
ZUKEN Portal 750-652/040-000	

## 1 Compatible products

## 1.1 Optional accessories

## 1.1.1 DIN-rail

1.1.1.1 Mounting accessories



**Item no.: 210-196**  
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item no.: 210-198**  
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored



**Item no.: 210-508**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored



**Item no.: 210-197**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored



**Item no.: 210-506**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored



**Item no.: 210-114**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item no.: 210-118**  
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item no.: 210-115**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored



**Item no.: 210-112**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored



**Item no.: 210-504**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored



**Item no.: 210-113**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item no.: 210-505**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored

1.1.2 Marking

1.1.2.1 Group marker carrier



**Item no.: 750-107**  
Group marker carrier

1.1.2.2 Marker



**Item no.: 2009-145/000-006**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



**Item no.: 2009-145/000-007**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



**Item no.: 2009-145/000-023**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



**Item no.: 2009-145/000-012**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



**Item no.: 2009-145/000-005**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



**Item no.: 2009-145/000-024**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



**Item no.: 2009-145**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item no.: 2009-145/000-002**  
Mini-WSB In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



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



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



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



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



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



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



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



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



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

### 1.1.2.3 Marker carrier



**Item no.:** 750-103

Group marker carrier

### 1.1.3 Shield termination

#### 1.1.3.1 Shield clamping saddles



**Item no.:** 790-108

Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



**Item no.:** 790-208

Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



**Item no.:** 790-116

Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



**Item no.:** 790-216

Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



**Item no.:** 790-124

Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



**Item no.:** 790-220

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



**Item no.:** 790-140

Shield clamping saddle; diameter of compatible conductor

### 1.1.4 System enclosure

#### 1.1.4.1 System enclosure



**Item no.:** 850-825

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20



**Item no.:** 850-826

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



**Item no.:** 850-827

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



**Item no.:** 850-828

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



**Item no.:** 850-826/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip



**Item no.:** 850-827/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip



**Item no.:** 850-828/002-000

IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip



**Item no.:** 850-834

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



**Item no.:** 850-835

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



**Item no.:** 850-836

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



**Item no.:** 850-814/002-000

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



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

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



**Item no.:** 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate



**Item no.:** 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate