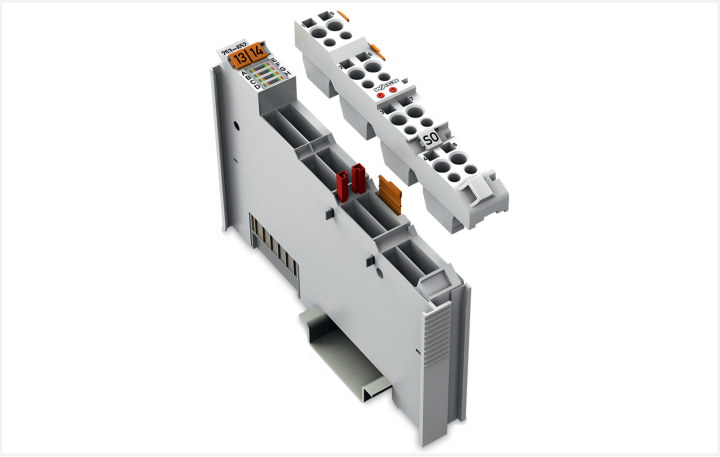
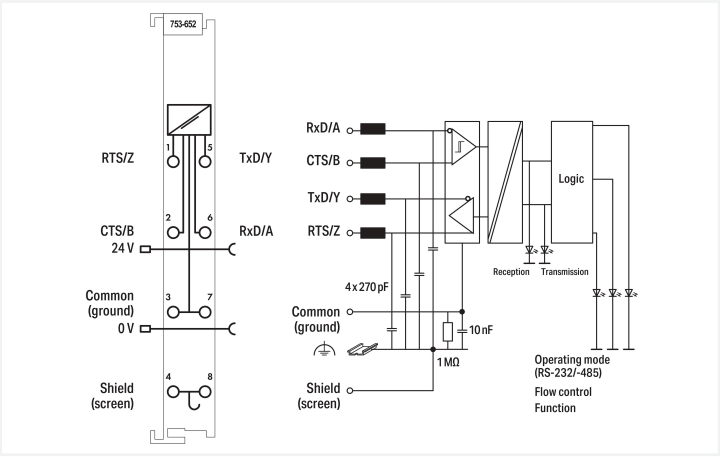
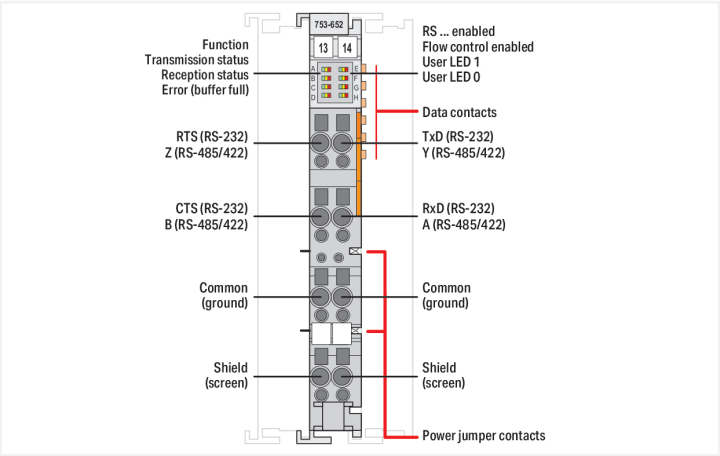
Data Sheet | Item Number: 753-652

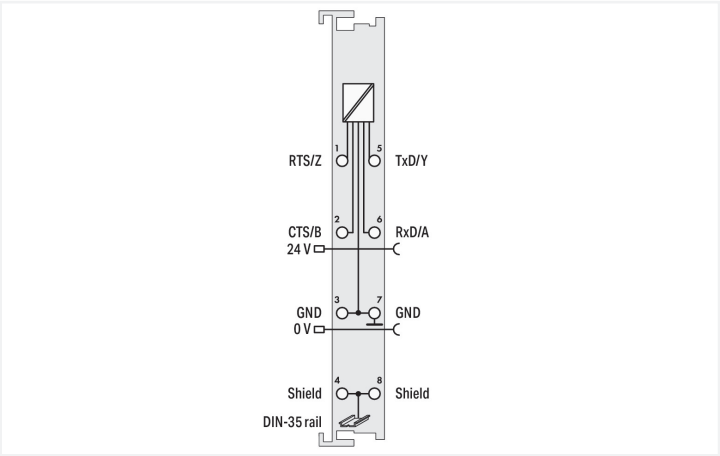
RS-232/485 Serial Interface

https://www.wago.com/753-652









This serial interface module connects RS-485/-422 or RS-232 C 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.

Notes

Note	Pluggable connectors and coding fingers (753 Series) are not included.

Technical data

Signal type	RS-232 RS-422 / RS-485
Transmission 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
Line length	RS-485/-422: approx. 1000 m (max.) twisted pair, RS-232: 40 m (max.)
Data width	1 x 46/1 x 22/1 x 6-byte input/output (parameterizable), 2-byte control/status
Parity	None/Odd/Even
Number of data bits	7/8, adjustable
Number of stop bits	1/2, adjustable
Buffer	2560-byte input / 512-byte output
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	85 mA

Technical data

Supply voltage (field)	24 VDC; via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Isolation	500 V system/field
Indicators	LED (A-H) green/yellow/red: function, transmission status, reception status, error (buffer full), RS ... active, flow control active, user LED 1, user LED 0
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A

Connection Data

Connection technology: I/O	8 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	69 mm / 2.717 inches
Depth from upper-edge of DIN-rail	61.8 mm / 2.433 inches

Mechanical data

Mounting type	DIN-35 rail
Pluggable connector	pluggable

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	0.748 MJ
Weight	42.1 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom
Relative humidity (without condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61131-2, marine applications
EMC emission of interference	per EN 61131-2, marine applications
Exposure to pollutants	per IEC 60068-2-42 and IEC 60068-2-43
Permissible H_2S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

Continued on next page

Commercial data

Product Group	15 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821329749
Customs tariff number	85389099990

Product Classification

UNSPSC	32151705
eCl@ss 10.0	27-24-26-08
eCl@ss 9.0	27-24-26-08
ETIM 9.0	EC001604
ETIM 10.0	EC001604
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	4a205749-da77-40cf-b225-1e12ead7dcce
SCIP notification number (Belgium)	30261085-e79b-4af3-8992-3694ba69f6f8
SCIP notification number (Bulgaria)	e4c530cf-867b-45ae-981a-14117fb069bf
SCIP notification number (Czech Republic)	e9774b40-dc6f-404e-95c6-998158c1ef0a
SCIP notification number (Denmark)	d6000c86-469a-40ef-9ad3-744bab8e66d2
SCIP notification number (Finland)	bc301afa-dd06-4c50-8bbb-39d1d00a200b
SCIP notification number (France)	cd5776db-b070-497a-a67c-715319ae5217
SCIP notification number (Germany)	7625051d-25f6-424b-8287-9b0a1286412a
SCIP notification number (Hungary)	b6c5b920-dd4b-46a6-a15f-5827abb5d1a0
SCIP notification number (Italy)	86742c90-c023-4b68-a4a3-acce3494bb33
SCIP notification number (Netherlands)	3e8bf8f5-08d5-4a6d-ac26-51d321014bfc
SCIP notification number (Poland)	5f8b9846-f8d4-4b07-94a5-151ed22c5717
SCIP notification number (Romania)	cfd9c780-7119-47c6-80ac-ac531268373f
SCIP notification number (Sweden)	9ea13498-3f54-4fda-badf-8fb93bfafb2d

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Continued on next page

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412
BSH Bundesamt fuer Seeschiffahrt und Hydrographie	-	1104
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23
RINA RINA Germany GmbH	-	ELE343521XG001

Approvals for hazardous areas

Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
CCCEx CQST/CNEx	CNCA-C23-01	2020312310000213 (Ex ec IIC T4 Gc)
IECEx TUEV Nord Cert GmbH	IEC 60079-0	IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	TÜV 12.1297 X
UKEx WAGO GmbH & Co. KG	EN 60079-0	UKCA_WA GO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 753-652

Documentation

Manual

System Manual Series 750/753		
Product Manual RS-232/ RS-485 Serial Interface	V 2.0.0	pdf 5469.32 KB

System Description

750/753 Series I/O-System – General Product Information		pdf 953.35 KB
Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 770.48 KB

Bid Text

753-652	16.10.2017	doc 28.00 KB
753-652	19.02.2019	xml 5.88 KB

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB

Continued on next page

Application Notes

Application Note CoDeSys 2.3

Beispiel zur Verwendung der Bibliothek Modb_I05.lib (a102607)	1.0.0 21.06.2011	zip 707.22 KB	

Application Note e!COCKPIT

eCOCKPIT application note WagoSolElsner	1.0.2 06.12.2021	pdf 512.20 KB	
e!COCKPIT application note WagoSolHKW	1.0.2 06.12.2021	pdf 611.79 KB	
eCOCKPIT Application Note WagoAppDMX	1.0.3 06.12.2021	pdf 749.91 KB	
e!COCKPIT Application Note WagoSolEAP (a2019006)	2021-11-08 06.12.2021	pdf 659.32 KB	
e!COCKPIT Application Note WagoAppPower-Supply (a2019012)	1.1.1 06.12.2021	pdf 707.04 KB	
CODESYS 3 Anwendungshinweis Thies Wettersensoren (a2021014)	2021-12-06 06.12.2021	zip 924.51 KB	

CAD/CAE-Data

CAD data

2D/3D Models 753-652

CAE data

EPLAN Data Portal 753-652

WSCAD Universe 753-652

ZUKEN Portal 753-652

Libraries

Library

Libraries for Building Automation CODESYS 2.3	2025-01-30 30.01.2025	zip 71441.83 KB	

1 Compatible Products

1.1 Required Accessories

1.1.1 Pluggable connector

1.1.1.1 Male connector/plug

Item No.: 753-110
Plug

1.2 Optional Accessories

1.2.1 DIN-rail

1.2.1.1 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.: 210-197
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored

Item No.: 210-114
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.: 210-112
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.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.2.2 Marking

1.2.2.1 Group marker carrier

Item No.: 750-107
Group marker carrier

1.2.2.2 Marker

Item No.: 2009-145/000-006
Mini-WSB Inline; 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 Inline; 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 Inline; 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 Inline; 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 Inline; 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 Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet

Item No.: 2009-145
Mini-WSB Inline; 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 Inline; 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

Continued on next page

1.2.2.3 Marker carrier

Item No.: 750-103
Group marker carrier

1.2.3 Pluggable connector

1.2.3.1 Coding

Item No.: 753-150
753 Series coding elements

1.2.4 Shield termination

1.2.4.1 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

1.2.5 System enclosure

1.2.5.1 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