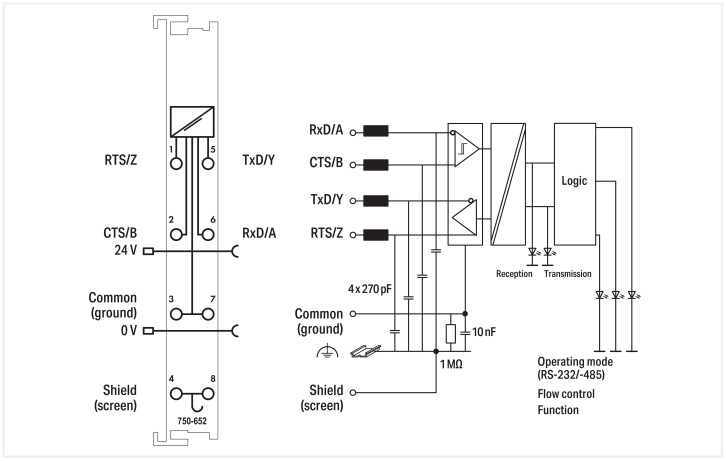
Data Sheet | Item Number: 750-652

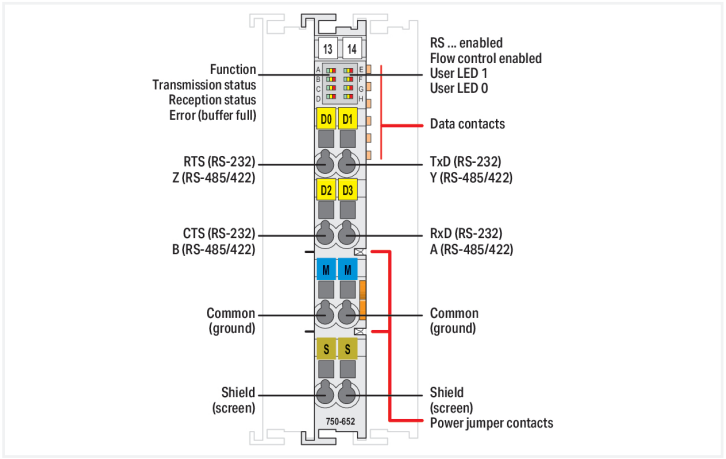
RS-232/485 Serial Interface

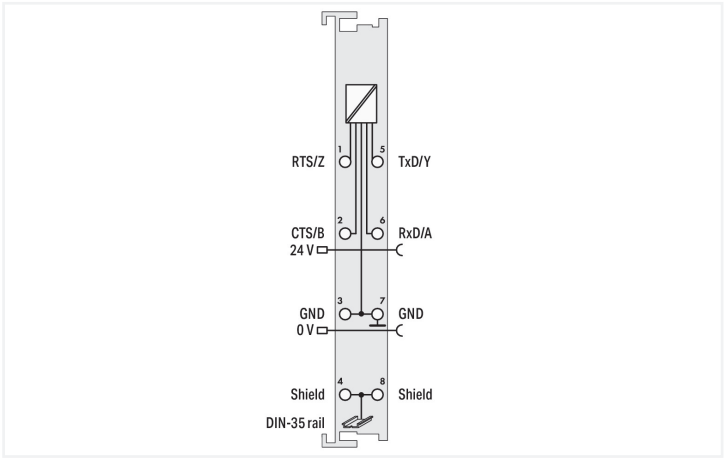
https://www.wago.com/750-652





Color: light gray





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	**Compatible with Couplers/Controllers:** See manual in Section 3 “Device Description”

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

Technical data

Buffer	2560-byte input / 512-byte output
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	85 mA
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	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
Pluggable connector	fixed

Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.876 MJ
Weight	49.8 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

Continued on next page

Environmental requirements

Permissible SO_2 contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Product Group	15 (I/O System)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821002949
Customs tariff number	85389099990

Product Classification

UNSPSC	32101517
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)	782aad7f-4fb0-49fa-824c-0a93e99b09d0
SCIP notification number (Belgium)	0ef2de56-82ce-4989-a9a8-a2334f585e4e
SCIP notification number (Bulgaria)	e9f5fce0-9cba-47e0-9af9-66d9c4e85195
SCIP notification number (Czech Republic)	88b81ec5-8c85-4f4e-8b59-69604c86fd5c
SCIP notification number (Denmark)	06cdfd7e-ac4d-4e10-8637-cf978dd02987
SCIP notification number (Finland)	55444772-4c91-416b-92e4-c497afffabaa
SCIP notification number (France)	d7c55103-70d1-40cb-81d9-0dd32108d103
SCIP notification number (Germany)	ac0d6e7b-3595-40fc-ad11-ed2b2d40797e
SCIP notification number (Hungary)	91b9e00d-0af4-4977-ab7b-e320d944267d
SCIP notification number (Italy)	3b9977ba-893b-4df0-a7fa-0441a6ed3809
SCIP notification number (Netherlands)	e0d1d733-3c2e-4425-b7a0-037741c2fe6a
SCIP notification number (Poland)	01af622a-b069-4742-b90e-572880aeb645
SCIP notification number (Romania)	f61e2d9f-d7cc-47cb-a761-fef8ee5319f7
SCIP notification number (Sweden)	1647cbcc-dbe0-4c40-abab-de8dc8fcd37f

Continued on next page

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	-	MSIP-REM-W43-SIM750
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	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412
BSH Bundesamt fuer Seeschiffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	30389/C0 BV
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_WAGO22UKEX003X_ec
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 750-652

Continued on next page

Documentation

Manual

Product Manual Serial Interface RS-232 / RS-485	V 2.0.0	pdf 3716.42 KB	
System Manual Series 750/753			

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

750-652	19.02.2019	xml 5.49 KB	
750-652	16.10.2017	doc 28.00 KB	
ausschreiben.de 750-652			

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 159.76 KB	

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	
Using a Wago PLC to control a SMC gripper type LEFH (a500031)	1.0.0 24.11.2011	zip 877.08 KB	
Application note Wago OBIS Protocol 01 (2019014)	2019-09-24 24.09.2019	zip 1110.17 KB	
Application Note Library WagoBuilding_01	03.11.2015 12.11.2015	zip 1178.23 KB	
Application note: "ThiesModbusWeatherSensors_01" library with Thies Weather Station Compact WSC11	16.11.2015 29.01.2016	zip 1081.38 KB	
Application note: "ThiesModbusWeatherSensors_01" library with Thies Clima Sensor US and Thies Pyranometer GSM 10.7	16.11.2015 29.01.2016	zip 1218.05 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 WagoAppPowerSupply (a2019012)	1.1.1 06.12.2021	pdf 707.04 KB	
e!COCKPIT AppNote GENIbus (a2021003)	1.0.1 06.12.2021	pdf 755.13 KB	
CODESYS 3 Anwendungshinweis Thies Wettersensoren (a2021014)	2021-12-06 06.12.2021	zip 924.51 KB	

Application note SIEMENS

Serial Interface Using TIA Portal (a500900)	1.0.0 05.01.2021	zip 2940.72 KB	

Continued on next page

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 750-652	EPLAN Data Portal 750-652
	WSCAD Universe 750-652
	ZUKEN Portal 750-652

Device Files

Device Driver

WAGO USB Service Kabel Treiber / Serie 750 und 857	6.5.3.0 10.09.2014	zip 4721.96 KB

Libraries

Library

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

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.: 210-197
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.: 210-115
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.: 210-113
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored

1.1.2 Marking

1.1.2.1 Group marker carrier



Item No.: 750-107
Group marker carrier

Continued on next page

1.1.2.2 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

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