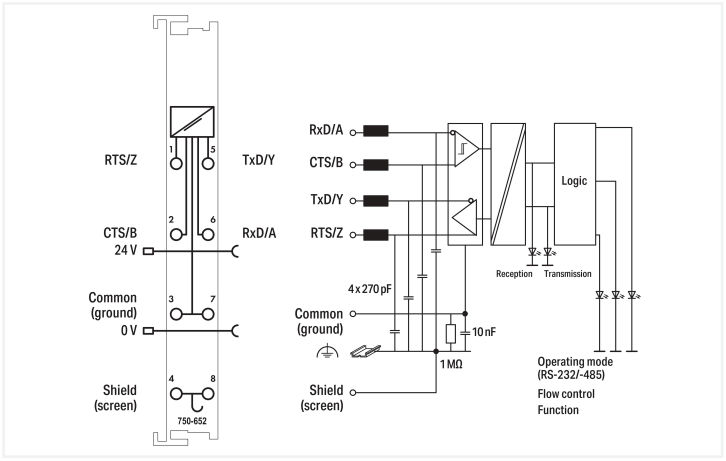
Data Sheet | Item Number: 750-652/025-000

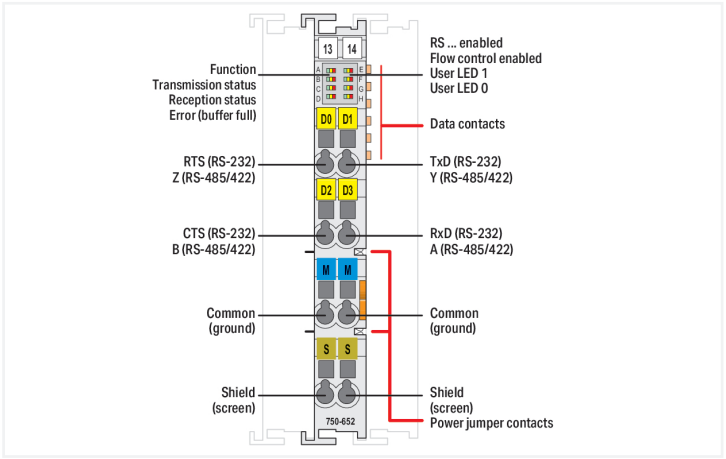
RS-232/485 Serial Interface; Ext. Temperature

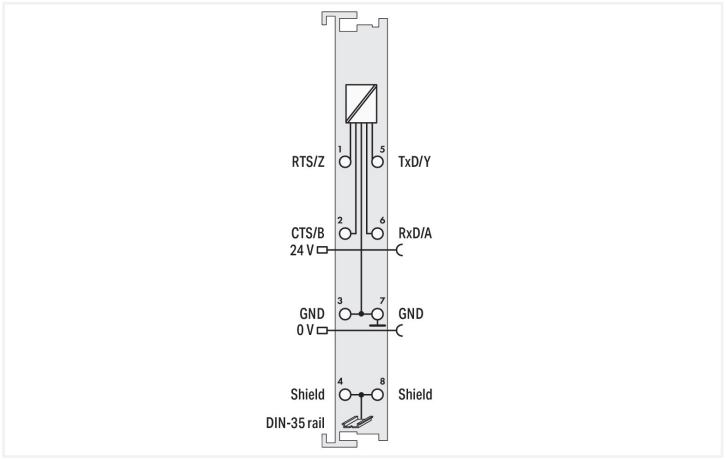
https://www.wago.com/750-652/025-000





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.

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

Technical data

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	0.875 MJ
Weight	50.5 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	-20 ... +60 °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 %
Relative humidity (with condensation)	Short-term condensation per Class 3K6/IEC EN 60721-3-3 and E-DIN 40046-721-3, accounting for a temperature range of –20 to +60 °C (except for wind-driven precipitation, water and ice formation)
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	4050821129110
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)	27032d0a-883d-468f-9cb6-088aed8ef215
SCIP notification number (Belgium)	065a1859-4dfa-4afa-93ea-596bb13ab6a1
SCIP notification number (Bulgaria)	bc6d1a6b-6f1a-4bd0-aa78-fae884cac4c2
SCIP notification number (Czech Republic)	c52bcfbd-3c89-44b0-99f5-79335a9b9081
SCIP notification number (Denmark)	9fa9f45b-63fd-4d35-94f4-77cf78b4bc9e
SCIP notification number (Finland)	d2ecd908-0222-4148-9094-474952bfb124
SCIP notification number (France)	735a8f7a-a40a-40c8-8156-1c1b84a256be
SCIP notification number (Germany)	4848744b-bedb-47ea-8a40-c29e8eb81f1c
SCIP notification number (Hungary)	212333fc-06fd-4fc9-8837-cf964aa99fac
SCIP notification number (Italy)	895f8dbb-56a3-45b1-9efb-2f5ec6f859e4
SCIP notification number (Netherlands)	24e2dd56-f34e-4faa-95c1-148f86c586bb
SCIP notification number (Poland)	61305c86-7651-4591-b007-860a9db7ce8a
SCIP notification number (Romania)	8cc341f1-4585-4430-98ea-9f5f63872f71
SCIP notification number (Sweden)	19b7563f-d21d-4e0a-aee1-e064b492ab81

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	-	22-2227356-PDA
BSH Bundesamt fuer Seeschiffahrt und Hydrographie	-	1104
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00001J4
LR Lloyds Register	-	LR2475997TA
PRS Polski Rejestr Statków	-	TE/1102/880590/23

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
750-652/025-000

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

750-652/025-000	19.02.2019	xml 5.64 KB	
750-652/025-000	16.10.2017	doc 28.00 KB	

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	
Application note Wago OBIS Protocol 01 (2019014)	2019-09-24 24.09.2019	zip 1110.17 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	
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	

CAD/CAE-Data

CAD data

2D/3D Models 750-652/025-000	

CAE data

EPLAN Data Portal 750-652/025-000	
WSCAD Universe 750-652/025-000	
ZUKEN Portal 750-652/025-000	

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Device Files

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

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

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1.1.2.2 Marker



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