

The module's built-in interface connects to any device equipped with an RS-485 serial interface. The interface operates in accordance with both TIA/EIA-485-A and DIN 66259 standards. The connected device communicates directly with the control unit via the fieldbus coupler. The active communication channel works independently 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 directly connects to the DIN-rail.

Technical data	
Signal type	RS-422 / RS-485
Baud rate	9.6 kBd
Bit transfer	ISO 8482 / DIN 66259 - 4
Transmission channels	1 Tx/D / 1 Rx/D, full-duplex
Line length	approx. 1000 m twisted pair
Data width	1 x 24-bit input/output (3-byte user data); 1 x 8-bit control/status
Parity	None
Number of data bits	8
Number of stop bits	1
Buffer	120-byte input / 16-byte output
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	65 mA
Isolation	500 V system/field

Connection data

Connection technology: inputs/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	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	12 mm / 0.472 inches
Height	100 mm / 3.937 inches
Depth	69.8 mm / 2.748 inches
Depth from upper-edge of DIN-rail	62.6 mm / 2.465 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.011 MJ
Weight	48.8 g
Conformity marking	CE

Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
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 61000-6-2, marine applications
EMC emission of interference	per 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)
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 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4045454519582
Customs tariff number VKOrg Germany	85389099990

Approvals and certificates

Ex-Approvals



Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCCEX CQST/CNEX	CNCA-C23-01	2020312310000215 (Ex nA IIC T4 Gc)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex nA IIC T4 Gc X)
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	BR-Ex_TÜV 12.1297 X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

Country specific Approvals



Approval	Standard	Certificate name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	-	MSIP-REM-W43-SIM750

Ship Approvals



Approval	Standard	Certificate name
ABS American Bureau of Shipping	-	22-2219060
BSH Bundesamt fuer Seeschifffahrt und Hydrographie	-	1104
BV Bureau Veritas S.A.	-	13453/E0 BV
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/2236/880590/19
RINA RINA Germany GmbH	-	ELE343521XG001

UL-Approvals



Approval	Standard	Certificate name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.1

Downloads

Environmental Product Compliance

Compliance Search


Environmental Product
Compliance 750-653



Documentation

Manual


RS-485 Serial Interface V 1.0.3 pdf
430.74 KB 

System Manual WAGO I/O System 750 / 753 V 3.1.0
11.05.2022 pdf
8495.90 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 


Use in Hazardous Environments V 1.0.0 pdf
1007.06 KB 

Additional Information

Disposal; Electrical and electronic equipment, Packaging V 1.0.0 pdf
259.56 KB 

Bid Text

750-653 19.02.2019 xml
4.38 KB 

750-653 16.10.2017 doc
26.50 KB 


Application Notes

Application Note CoDeSys 2.3

Anbindung SteuersWAVE Sensoren (a500870) V1.0.0
21.02.2017 zip
1476.32 KB 


CAD/CAE-Data

CAD data

2D/3D Models 750-653 

CAE data


EPLAN Data Portal 750-653 

WSCAD Universe 750-653 

ZUKEN Portal 750-653 

Device Files

Device Driver

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

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at: www.wago.com