



Increasingly complex products, manufacturing flexibility and high demands on quality assurance require intelligent, configurable and programmable sensors. To fulfill these demands, IO-Link streamlines the varying interfaces required to connect to a control system and tooling. A 3-wire connection can communicate process data (as single bits, bytes and data blocks for input and output data). It also communicates acyclic data (for identification, configuration, parameterization and diagnostics) with up to 230.4 kBaud to both sensors and actuators. The functions and performance data are defined via device description files for the IO-Link devices and can be easily customized via WAGO-I/O-CHECK or the WAGO IO-Link Configurator. If a device must be replaced, the configuration and parameterization can be automatically restored without maintenance personnel. This makes project design, installation and operation considerably simpler!

The module meets the IO-Link test specification V1.1.3 from January 2021.

Four different IO-Link devices, or even digital standard sensors/actuators, can connect to the WAGO 750-1657 IO-Link Master simultaneously. At just 12 mm (0.47 inch) wide, the module has three connections for each of the four channels.

Technical data

Topology	4 IO-Link ports (point-to-point)
Supply current per port	Max. 0.3 A (max. 1 port up to 1 A)
Transmission modes	4.8 kBaud (COM 1), 38.4 kBaud (COM 2), 230.4 kBaud (COM 3)
Data width	4–48 bytes, configurable
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	52 mA
Supply voltage (field)	24 VDC (-15 ... +20 %); via power jumper contacts (power supply via blade contact; transmission (field side supply voltage only) via spring contact)
Current consumption, field supply (module with no external load)	11 mA
Isolation	500 V system/field
Indicators	LED (1, 2, 9, 10) red/green: operating status C/Q 1 ... C/Q 4; LED (8) green: operating status IO-Link master; LED (16) red: group error
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	16 x Push-in CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
Solid conductor	0.08 ... 1.5 mm ² / 28 ... 16 AWG
Fine-stranded conductor	0.25 ... 1.5 mm ² / 22 ... 16 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection requirement (permissible cable length)	20 m

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	fixed

Material data

Housing material	Polycarbonate; polyamide 6.6
Fire load	0.591 MJ
Weight	47.9 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	Per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27

Environmental requirements

EMC immunity to interference	per EN 61000-6-2, EN 61131-2
EMC emission of interference	per EN 61000-6-4, EN 61131-2
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

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4066966426274
Customs tariff number	85389091890

Product Classification

UNSPSC	32151705
ETIM 9.0	EC001604
ETIM 10.0	EC001604
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
SCIP notification number (Austria)	417e4afb-df33-4fe0-b956-b6feac0973dd
SCIP notification number (Belgium)	019effd5-7801-41ea-a4bf-b1afd4ced148
SCIP notification number (Bulgaria)	85f5d345-bf7c-46e0-b0ab-f63301f3cbb5
SCIP notification number (Czech Republic)	6ec46183-7e3e-461f-bee5-f79741fde24a
SCIP notification number (Denmark)	9bee9ae5-7fc8-4331-86c8-b67587ebb4d0
SCIP notification number (Finland)	b676605c-4bb8-41ec-9072-1545874fca71
SCIP notification number (France)	956001fd-676f-4082-a8c6-d2ff45777eed
SCIP notification number (Germany)	ca507305-84aa-4a29-be8f-42d8168ef012
SCIP notification number (Hungary)	d6d5c5dc-b3fe-4717-bd8e-f41e677b9bd2
SCIP notification number (Italy)	6ca0b994-b062-4f08-8c50-743c8123a061
SCIP notification number (Netherlands)	a6670b2f-7af5-4b1a-86d9-6a094492ac3a
SCIP notification number (Poland)	411abd2f-5a1d-4833-b95b-4ec37fe8030a
SCIP notification number (Sweden)	b59b76a1-8efa-479e-b711-9f191f556d3c

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-MSM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	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 hazardous areas



Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 14.0035 X (Ex ec IIC T4 Gc)
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 750-1657	↓

Documentation

Manual			
Product Manual 4-Port IO-Link Master	V 1.2.0 18.04.2024	pdf 5040.14 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		
750-1657	docx 36.11 KB	↓
750-1657	x81 6.25 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 750-1657	↓

Device Files

Device Driver

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

Library

Function blocks for the IO-Link module 750-657	1.0.4 07.09.2017	zip 444.88 KB	
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