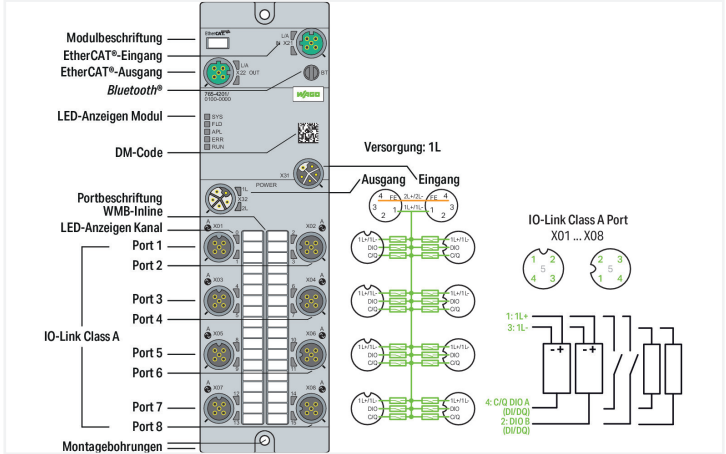




Application area:
Decentralized processing of digital and IO-Link signals

This device controls IO-Link-capable digital field devices (e.g., actuators and hubs) and records digital signals from IO-Link-capable field devices (e.g., sensors and hubs) that are sent or received by a higher-level controller.

The device is designed as a Class A master and offers 8 IO-Link ports or 16 digital inputs/outputs.

IO-Link:
The device has several IO-Link communication interfaces for interoperation with IO-Link devices.
The IO-Link interface enables direct access to the process and diagnostic data and allows the parameters of the connected devices to be set during operation.
The IODD can also be downloaded via IODDfinder (<https://ioddfinder.io-link.com>).

Technical data			
Fieldbus		Device functions	
Communications	EtherCAT® AoE, EoE, FoE	Parameter	Input filter Output current Temperature
Connection technology: communication/ fieldbus	2 x D-coded M12; 4-pole	Diagnostics	Undervoltage; overcurrent; overload; overtemperature
Interface standard	10BASE-T/100BASE-TX; potential-free	Device functions	Bluetooth® OPC UA server
Autonegotiation; autocrossover	Yes	Visualization	Android/iOS app Web server



IO-Link master	
IO-Link master classification	Class A; V1.1 specification
Port-Modus	IO-Link: autoconfig, manual, tool-based DI DO
Cycle time	400 µs (min.)
Operating mode	IO-Link master, DI or DO (adjustable for pin 4 per port); DI or DO (adjustable for pin 2 per port)

IO-Link ports	
Number of digital inputs	16
Number of digital outputs	16
Connection technology: inputs/outputs	8 x A-coded M12; 5-pole
Signal type (voltage)	24 VDC
Input characteristic	high-side switching Type 3, per IEC 61131-2
Input filter	0.2 ... 20 ms
Output current (per channel)	2 A (typ.) for DO
Supply current per port	1L: 1 A for IO-Link; 4 A (max.) for DIO

Supply (module)	
Connection technology: supply	2 x L-coded M12; 5-pole
Supply voltage	24 VDC (18 ... 31.2 V); 1L
Current consumption (max.)	16000 mA
Current consumption (note)	per supply line; overload- and short-cir- cuit-protected
Reverse voltage protection	Yes

Physical data	
Width	60 mm / 2.362 inches
Height	30 mm / 1.181 inches
Depth	210 mm / 8.268 inches

Material data	
Fire load	0 MJ
Weight	670 g
Conformity marking	CE

Environmental requirements	
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +80 °C
Protection type	IP67
Protection class	III per EN 61140, IEC 61140, VDE 0140-1
Pollution degree	3 (EN 60664-1)
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Relative humidity (without condensation)	95 %
Vibration resistance	5g per IEC 60068-2-6
Shock resistance	Short-term: 50g/11 ms/half-sine per IEC 60068-2-27; Long-term: 30g/6 ms/half-sine per IEC 60068-2-29
EMC immunity to interference	per EN 61000-6-2
EMC emission of interference	per EN 61000-6-4



Commercial data		
PU (SPU)		1 pcs
Packaging type		Box
Country of origin		DE
GTIN		4066966063134
Customs tariff number		85371098990

Product classification		
UNSPSC		43222605
ETIM 9.0		EC001601
ETIM 8.0		EC001601
ECCN		NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

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	KC R-R-W43-FB765
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	-	-

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 765-4201/100-000	

Documentation

Manual			
Product Manual 8-Port-IO Link Master Class A; EtherCAT; 24 VDC / 2.0 A;	V 2.0.0 19.07.2022	pdf 8870.71 KB	

System Description		
WAGO I/O System Field; General Product Information	pdf 1009.23 KB	



Instruction Leaflet			
I/O System Field package insert	V 1.3.0 01.04.2025	pdf 1083.98 KB	↓

Application Notes

Application Note e!COCKPIT			
e!COCKPIT Application Note EtherCAT IO-Field (a2022003)	1.0.0 23.03.2023	pptx 2143.63 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 765-4201/100-000	↓

CAE data	
EPLAN Data Portal 765-4201/100-000	↓

Runtime Software

Firmware			
0765-x2xx, EtherCat IO-Field	V 04 02.02.2023	zip 1582.68 KB	↓

Libraries

Device Description File			
Gerätebeschreibungsdateien 765-42xx, 765-12xx, EtherCAT	V1_1_0_22	zip 75.78 KB	↓

1 Compatible Products

1.1 Required Accessories

1.1.1 Cover

1.1.1.1 Cover



[Item No.: 756-8103](#)
M12 protective cap; for unused plugs

[Item No.: 756-8102](#)
M12 protective cap; for unused sockets



1.1.2 Marking

1.1.2.1 Marker



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.2.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.3 Tool

1.1.3.1 Assembly tool



Item No.: 206-701
Torque wrench M8 and M12; Assembly kit

1.2 Optional Accessories

1.2.1 Cables and connectors

1.2.1.1 Configurable Connector



Item No.: 756-9205/040-000
Fitted pluggable connector; 4-pole; M12 plug, right angle; Spring



Item No.: 756-9202/040-000
Fitted pluggable connector; 4-pole; M12 plug, straight, A-coded; Spring



Item No.: 756-9701/050-000
Fitted pluggable connector; 5-pole, shielded; M12 plug, straight; IDC technology



Item No.: 756-9711/050-000
Fitted pluggable connector; 5-pole, shielded; M12 socket, straight; IDC technology

1.2.1.2 Configurable Shielded Connector



Item No.: 756-9501/040-000
Accessories; M12 plug, right angle; 4-pole



Item No.: 756-9501/060-000
Fitted pluggable connector; 4-pole, shielded; M12 plug, straight, D-coded; Spring

1.2.1.3 Distribution connector



Item No.: 756-9301/040-000
Accessories; 4-pole



Item No.: 756-9301/050-000
Accessories; 5-pole



Item No.: 756-5517/040-010
Sensor/Actuator cable; 2xM12 socket; angled; M12A plug; straight; 4-pole; Length: 1 m



Item No.: 756-5517/040-020
Sensor/Actuator cable; 2xM12 socket; angled; M12A plug; straight; 4-pole; Length: 2 m



Item No.: 756-5516/040-010
Sensor/Actuator cable; 2xM12 socket; straight; M12A plug; straight; 4-pole; Length: 1 m



Item No.: 756-5516/040-020
Sensor/Actuator cable; 2xM12 socket; straight; M12A plug; straight; 4-pole; Length: 2 m



Item No.: 756-5514/040-010
Sensor/Actuator cable; 2xM8 socket; angled; M12A plug; straight; 4-pole; Length: 1 m



Item No.: 756-5514/040-020
Sensor/Actuator cable; 2xM8 socket; angled; M12A plug; straight; 4-pole; Length: 2 m

1.2.1.3 Distribution connector

**Item No.: 756-5513/040-010**

Sensor/Actuator cable; 2xM8 socket; straight; M12A plug; straight; 4-pole; Length: 1 m

**Item No.: 756-5513/040-020**

Sensor/Actuator cable; 2xM8 socket; straight; M12A plug; straight; 4-pole; Length: 2 m

1.2.1.4 ETHERNET/PROFINET cable

**Item No.: 756-1202/060-100**

ETHERNET cable; M12D plug; angled; 4-pole; Length: 10 m

**Item No.: 756-1202/060-020**

ETHERNET cable; M12D plug; angled; 4-pole; Length: 2 m

**Item No.: 756-1202/060-200**

ETHERNET cable; M12D plug; angled; 4-pole; Length: 20 m

**Item No.: 756-1202/060-050**

ETHERNET cable; M12D plug; angled; 4-pole; Length: 5 m

**Item No.: 756-1204/060-010**

ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 1 m

**Item No.: 756-1204/060-100**

ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 10 m

**Item No.: 756-1204/060-020**

ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 2 m

**Item No.: 756-1204/060-200**

ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 20 m

**Item No.: 756-1204/060-030**

ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 3 m

**Item No.: 756-1204/060-050**

ETHERNET cable; M12D plug; angled; M12D plug; angled; 4-pole; Length: 5 m

**Item No.: 756-1201/060-100**

ETHERNET cable; M12D plug; straight; 4-pole; Length: 10 m

**Item No.: 756-1201/060-020**

ETHERNET cable; M12D plug; straight; 4-pole; Length: 2 m

**Item No.: 756-1201/060-200**

ETHERNET cable; M12D plug; straight; 4-pole; Length: 20 m

**Item No.: 756-1201/060-050**

ETHERNET cable; M12D plug; straight; 4-pole; Length: 5 m

**Item No.: 756-1203/060-100**

ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 10 m

**Item No.: 756-1203/060-020**

ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 2 m

**Item No.: 756-1203/060-200**

ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 20 m

**Item No.: 756-1203/060-050**

ETHERNET cable; M12D plug; straight; M12D plug; straight; 4-pole; Length: 5 m

1.2.1.5 Power cable

**Item No.: 756-3504/050-100**

Power cable; M12L plug; angled; 5-pole; Length: 10 m

**Item No.: 756-3514/050-100**

Power cable; M12L plug; angled; 5-pole; Length: 10 m

**Item No.: 756-3504/050-150**

Power cable; M12L plug; angled; 5-pole; Length: 15 m

**Item No.: 756-3514/050-150**

Power cable; M12L plug; angled; 5-pole; Length: 15 m

**Item No.: 756-3504/050-020**

Power cable; M12L plug; angled; 5-pole; Length: 2 m

**Item No.: 756-3504/050-050**

Power cable; M12L plug; angled; 5-pole; Length: 5 m

**Item No.: 756-3514/050-050**

Power cable; M12L plug; angled; 5-pole; Length: 5 m

**Item No.: 756-3504/050-075**

Power cable; M12L plug; angled; 5-pole; Length: 7.5 m

**Item No.: 756-3514/050-075**

Power cable; M12L plug; angled; 5-pole; Length: 7.5 m

**Item No.: 756-3503/050-100**

Power cable; M12L plug; straight; 5-pole; Length: 10 m

**Item No.: 756-3513/050-100**

Power cable; M12L plug; straight; 5-pole; Length: 10 m

**Item No.: 756-3503/050-150**

Power cable; M12L plug; straight; 5-pole; Length: 15 m

**Item No.: 756-3513/050-150**

Power cable; M12L plug; straight; 5-pole; Length: 15 m

**Item No.: 756-3503/050-020**

Power cable; M12L plug; straight; 5-pole; Length: 2 m

**Item No.: 756-3513/050-020**

Power cable; M12L plug; straight; 5-pole; Length: 2 m

**Item No.: 756-3503/050-050**

Power cable; M12L plug; straight; 5-pole; Length: 5 m

**Item No.: 756-3513/050-050**

Power cable; M12L plug; straight; 5-pole; Length: 5 m

**Item No.: 756-3503/050-075**

Power cable; M12L plug; straight; 5-pole; Length: 7.5 m

**Item No.: 756-3513/050-075**

Power cable; M12L plug; straight; 5-pole; Length: 7.5 m

**Item No.: 756-3502/050-100**

Power cable; M12L socket; angled; 5-pole; Length: 10 m



1.2.1.6 Sensor/actuator cable

 Item No.: 756-5312/040-015 Sensor/Actuator cable; M12A plug; angled; 4-pole; Length: 1.5 m	 Item No.: 756-5312/040-100 Sensor/Actuator cable; M12A plug; angled; 4-pole; Length: 10 m	 Item No.: 756-5312/040-050 Sensor/Actuator cable; M12A plug; angled; 4-pole; Length: 5 m	 Item No.: 756-5311/040-015 Sensor/Actuator cable; M12A plug; straight; 4-pole; Length: 1.5 m
 Item No.: 756-5311/040-100 Sensor/Actuator cable; M12A plug; straight; 4-pole; Length: 10 m	 Item No.: 756-5311/040-050 Sensor/Actuator cable; M12A plug; straight; 4-pole; Length: 5 m	 Item No.: 756-5404/040-010 Sensor/Actuator cable; M12A socket; angled; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5404/040-020 Sensor/Actuator cable; M12A socket; angled; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5403/040-010 Sensor/Actuator cable; M12A socket; angled; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5403/040-020 Sensor/Actuator cable; M12A socket; angled; M12A plug; straight; 4-pole; Length: 2 m	 Item No.: 756-5402/040-010 Sensor/Actuator cable; M12A socket; straight; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5402/040-020 Sensor/Actuator cable; M12A socket; straight; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5401/040-010 Sensor/Actuator cable; M12A socket; straight; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5401/040-020 Sensor/Actuator cable; M12A socket; straight; M12A plug; straight; 4-pole; Length: 2 m	 Item No.: 756-5510/040-010 Sensor/Actuator cable; M8 socket; angled; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5510/040-020 Sensor/Actuator cable; M8 socket; angled; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5509/040-010 Sensor/Actuator cable; M8 socket; angled; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5509/040-020 Sensor/Actuator cable; M8 socket; angled; M12A plug; straight; 4-pole; Length: 2 m	 Item No.: 756-5508/040-010 Sensor/Actuator cable; M8 socket; straight; M12A plug; angled; 4-pole; Length: 1 m	 Item No.: 756-5508/040-020 Sensor/Actuator cable; M8 socket; straight; M12A plug; angled; 4-pole; Length: 2 m
 Item No.: 756-5507/040-010 Sensor/Actuator cable; M8 socket; straight; M12A plug; straight; 4-pole; Length: 1 m	 Item No.: 756-5507/040-020 Sensor/Actuator cable; M8 socket; straight; M12A plug; straight; 4-pole; Length: 2 m		