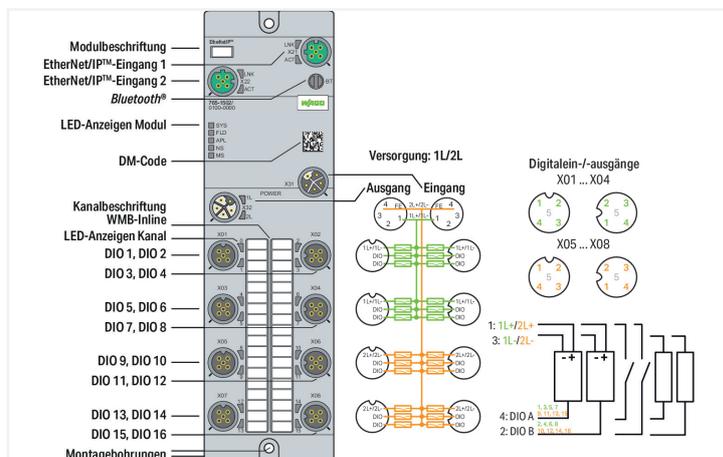


Data Sheet | Item Number: 765-1502/100-000

16-channel digital input/output; EtherNet/IP; DC 24 V / 2.0 A; 8xM12 connection; WideLine

<https://www.wago.com/765-1502/100-000>



Application:

Decentralized processing of digital signals

The device controls digital field devices (e.g., actuators) and records digital signals (e.g., sensors) that are sent or received by a higher-level controller.

The device offers 16 digital inputs/outputs.

Technical data

| Fieldbus | | Device functions | |
|---|-------------------------------------|------------------|---|
| Communications | EtherNet/IP™ BOOTP, DHCP, DLR | 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 |

Digital inputs/outputs

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

Supply (module)

| | |
|-------------------------------|--|
| Connection technology: supply | 2 x L-coded M12; 5-pole |
| Supply voltage | 24 VDC (18 ... 31.2 V); 1L/2L |
| Current consumption (max.) | 16000 mA |
| Current consumption (note) | per supply line; overload- and short-circuit-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 | 610 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 | 4066966063080 |
| Customs tariff number | 85371098990 |

Product Classification

| | |
|----------|----------------------|
| UNSPSC | 32151705 |
| ETIM 9.0 | EC001599 |
| ETIM 8.0 | EC001599 |
| ECCN | NO US CLASSIFICATION |

Environmental Product Compliance

| | |
|------------------------|-------------------------|
| RoHS Compliance Status | Compliant, No Exemption |
|------------------------|-------------------------|

Approvals / Certificates

General approvals **Declarations of conformity and manufacturer's declarations**



| 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 |

| Approval | Standard | Certificate Name |
|--|----------|------------------|
| EU-Declaration of Conformity WAGO GmbH & Co. KG | - | - |

Downloads

Environmental Product Compliance

Compliance Search

| | |
|--|---|
| Environmental Product Compliance 765-1502/100-000 | ↓ |
|--|---|

Documentation

Manual

| | | | |
|---|--|-------------------|---|
| Cybersecurity Manual WAGO I/O System Field | 4446174731 3 en-US 2025-08-04 12:00 13.08.2025 | pdf 491.44 KB | ↓ |
| Product Manual 16-Channel Digital Input/Output; EtherNet/IP | V 2.0.0 19.07.2022 | pdf 7844.18 KB | ↓ |

System Description

| | | |
|---|-------------------|---|
| WAGO I/O System Field; General Product Information | pdf 1009.23 KB | ↓ |
|---|-------------------|---|

CAD/CAE-Data

| CAD data | CAE data |
|--|---|
| 2D/3D Models 765-1502/100-000  | EPLAN Data Portal 765-1502/100-000  |

Runtime Software

| Firmware | | | |
|---------------------------------|--------------------|-------------------|---|
| 0765-x5xx, Ethernet/IP IO-Field | V 04 02.02.2023 | zip 1546.91 KB |  |

Libraries

| Device Description File | | | |
|--|------------------|------------------|---|
| 750-915; EDS-Dateien for EthernetIP / Serie 750, 765 and 767 | 12 09.07.2021 | zip 164.42 KB |  |
| Gerätebeschreibungsdateien 765-45xx, 765-15xx, EtherNet/IP | V1_1_0_22 | zip 74.02 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 Adapter



Item No.: 756-9503/040-000

Accessories; 4-pole



Item No.: 756-9504/040-000

Accessories; 4-pole

1.2.1.2 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

1.2.1.3 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

1.2.1.4 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



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

1.2.1.5 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 | | |

1.2.1.6 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 |
|  Item No.: 756-3512/050-100 Power cable; M12L socket; angled; 5-pole; Length: 10 m |  Item No.: 756-3502/050-150 Power cable; M12L socket; angled; 5-pole; Length: 15 m |  Item No.: 756-3512/050-150 Power cable; M12L socket; angled; 5-pole; Length: 15 m |  Item No.: 756-3502/050-020 Power cable; M12L socket; angled; 5-pole; Length: 2 m |
|  Item No.: 756-3512/050-020 Power cable; M12L socket; angled; 5-pole; Length: 2 m |  Item No.: 756-3502/050-050 Power cable; M12L socket; angled; 5-pole; Length: 5 m |  Item No.: 756-3512/050-050 Power cable; M12L socket; angled; 5-pole; Length: 5 m |  Item No.: 756-3502/050-075 Power cable; M12L socket; angled; 5-pole; Length: 7.5 m |

1.2.1.6 Power cable

| | | | |
|--|--|---|--|
|  Item No.: 756-3512/050-075 Power cable; M12L socket; angled; 5-pole; Length: 7.5 m |  Item No.: 756-3506/050-003 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 0.3 m |  Item No.: 756-3506/050-005 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 0.5 m |  Item No.: 756-3516/050-005 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 0.5 m |
|  Item No.: 756-3506/050-010 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 1 m |  Item No.: 756-3516/050-010 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 1 m |  Item No.: 756-3506/050-100 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 10 m |  Item No.: 756-3516/050-100 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 10 m |
|  Item No.: 756-3506/050-150 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 15 m |  Item No.: 756-3506/050-020 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 2 m |  Item No.: 756-3516/050-020 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 2 m |  Item No.: 756-3516/050-200 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 20 m |
|  Item No.: 756-3516/050-400 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 40 m |  Item No.: 756-3506/050-050 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 5 m |  Item No.: 756-3516/050-050 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 5 m |  Item No.: 756-3506/050-075 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 7.5 m |
|  Item No.: 756-3516/050-075 Power cable; M12L socket; angled; M12L plug; angled; 5-pole; Length: 7.5 m |  Item No.: 756-3501/050-100 Power cable; M12L socket; straight; 5-pole; Length: 10 m |  Item No.: 756-3511/050-100 Power cable; M12L socket; straight; 5-pole; Length: 10 m |  Item No.: 756-3501/050-150 Power cable; M12L socket; straight; 5-pole; Length: 15 m |
|  Item No.: 756-3511/050-150 Power cable; M12L socket; straight; 5-pole; Length: 15 m |  Item No.: 756-3501/050-020 Power cable; M12L socket; straight; 5-pole; Length: 2 m |  Item No.: 756-3511/050-020 Power cable; M12L socket; straight; 5-pole; Length: 2 m |  Item No.: 756-3501/050-050 Power cable; M12L socket; straight; 5-pole; Length: 5 m |
|  Item No.: 756-3511/050-050 Power cable; M12L socket; straight; 5-pole; Length: 5 m |  Item No.: 756-3501/050-075 Power cable; M12L socket; straight; 5-pole; Length: 7.5 m |  Item No.: 756-3511/050-075 Power cable; M12L socket; straight; 5-pole; Length: 7.5 m |  Item No.: 756-3505/050-003 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 0.3 m |
|  Item No.: 756-3505/050-005 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 0.5 m |  Item No.: 756-3515/050-005 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 0.5 m |  Item No.: 756-3505/050-010 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 1 m |  Item No.: 756-3515/050-010 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 1 m |
|  Item No.: 756-3505/050-100 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 10 m |  Item No.: 756-3515/050-100 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 10 m |  Item No.: 756-3505/050-150 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 15 m |  Item No.: 756-3505/050-020 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 2 m |
|  Item No.: 756-3515/050-020 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 2 m |  Item No.: 756-3515/050-200 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 20 m |  Item No.: 756-3515/050-300 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 30 m |  Item No.: 756-3515/050-400 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 40 m |
|  Item No.: 756-3505/050-050 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 5 m |  Item No.: 756-3515/050-050 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 5 m |  Item No.: 756-3505/050-075 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 7.5 m |  Item No.: 756-3515/050-075 Power cable; M12L socket; straight; M12L plug; straight; 5-pole; Length: 7.5 m |

1.2.1.7 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