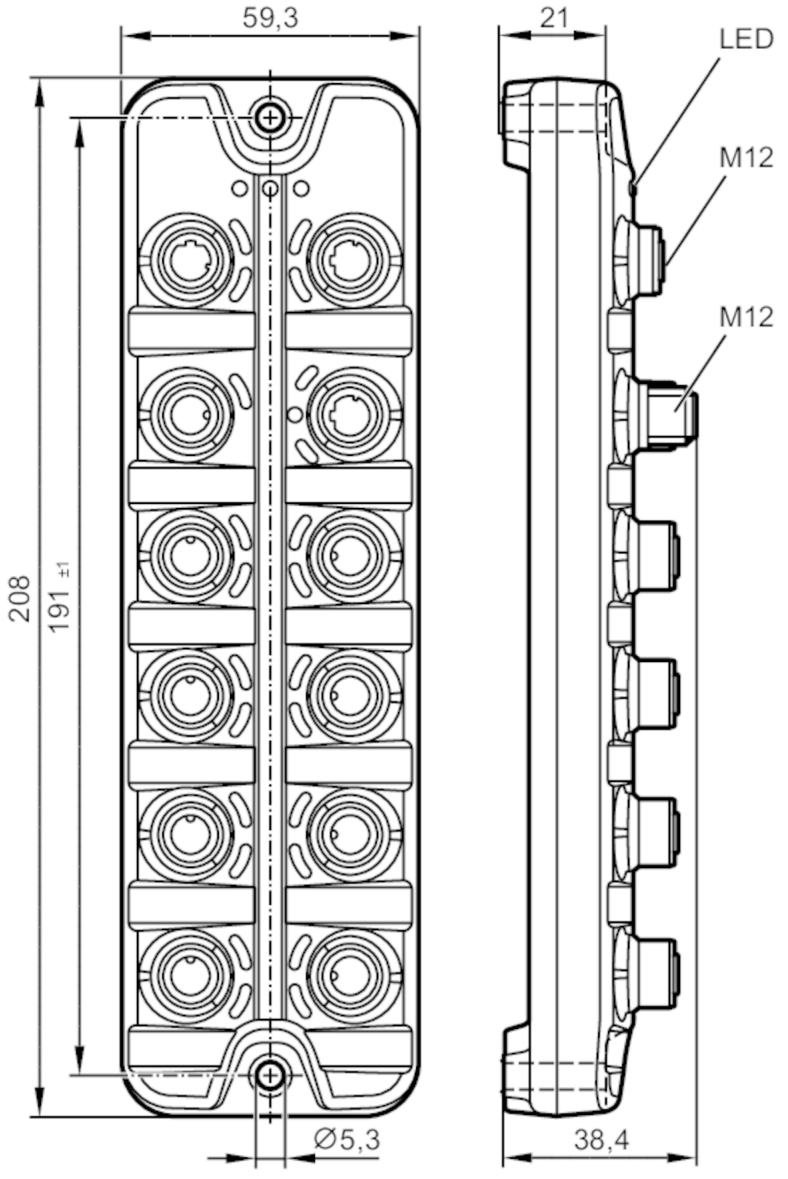
# AL1303

## IO-Link master with PROFINET interface

**IO-Link Master DL PN 8P IP69K**

Alternative articles: AL1307

When selecting an alternative article and accessories please note that technical data may differ!




| | | |
|---|---|---|
| **Application** | | |
| Application | | hygienic systems; I/O modules for field applications |
| Daisy-chain function | | fieldbus interface |
| **Electrical data** | | |
| Operating voltage | [V] | 20...28 DC;  (US ; to SELV/PELV) |
| Current consumption | [mA] | 300...3900;  (US) |
| Protection class | | III |

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| | | |
|---|---|---|
| **Sensor supply US** | | |
| Max. current load total | [A] | 3.6 |
| **Inputs / outputs** | | |
| Total number of inputs and outputs | | 16;  (configurable) |
| Number of inputs and outputs | | Number of digital inputs: 16; Number of digital outputs: 8 |
| **Inputs** | | |
| Number of digital inputs | | 16;  (IO-Link Port Class A: 8 x 2) |
| Switching level high | [V] | 11...28 |
| Switching level low | [V] | 0...5 |
| Digital inputs protected against short circuits | | yes |
| **Outputs** | | |
| Number of digital outputs | | 8;  (IO-Link Port Class A: 8 x 1) |
| Max. current load per output | [mA] | 300 |
| Short-circuit proof | | yes |
| **Interfaces** | | |
| Communication interface | | Ethernet; IO-Link |
| **Ethernet - PROFINET** | | |
| Transmission standard | | 100Base-TX |
| Transmission rate | | 100 MBit/s |
| Protocol | | PROFINET |
| Factory settings | | IP address: 0.0.0.0 |
| | | subnet mask: 0.0.0.0 |
| | | gateway IP address: 0.0.0.0 |
| | | MAC address: see type label |
| Note on interfaces | | CC-C (Conformance Class C) (IRT-Switch) |
| | | Netload Class III |
| | | SNMP (Simple Network Management Protocol) |
| | | MRP (Media Redundancy Protocol) |
| | | Supported network topologies: line |
| | | ring |
| **Ethernet - Internet of Things** | | |
| Transmission standard | | 10Base-T; 100Base-TX |
| Transmission rate | | 10 MBit/s; 100 MBit/s |
| Protocol | | MQTT JSON |
| Factory settings | | IP address: 169.254.x.x |
| | | subnet mask: 255.255.0.0 |
| | | gateway IP address: 0.0.0.0 |
| | | MAC address: see type label |
| Note on interfaces | | Secure protocol: HTTPS |
| **IO-Link Master** | | |
| Transmission type | | COM1 (4,8 kBaud); COM2 (38,4 kBaud); COM3 (230,4 kBaud) |
| IO-Link revision | | 1.1 |
| Number of ports class A | | 8 |

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| Operating conditions | | | |
|---|---|---|---|
| Ambient temperature | [°C] | -25...60 | |
| Storage temperature | [°C] | -25...85 | |
| Max. relative air humidity | [%] | 90 | |
| Protection | | IP 65; IP 66; IP 67; IP 69K; (operation with stainless steel protective caps: IP 69K) | |
| Protection rating (NEMA 250) | | 6P | |
| Pollution degree | | 2 | |
| Chemical media | | ISO 16750-5 | HLP, CC, DB, DC, DD, CA |
| | | NEMA 250 5.13.1 | AA |
| **Tests / approvals** | | | |
| EMC | | EN 61000-6-2 | |
| | | EN 61000-6-4 | |
| Shock resistance | | DIN EN 60068-2-27 | |
| Vibration resistance | | DIN EN 60068-2-64 2009-04 | |
| | | DIN EN 60068-2-6 2008-10 | |
| MTTF | [years] | 78 | |
| **Mechanical data** | | | |
| Weight | [g] | 395 | |
| Materials | | housing: PA grey; socket: stainless steel (316L/1.4404) | |
| Sealing material | | EPDM | |
| **Accessories** | | | |
| Items supplied | | Protective cap: 1 x M12, stainless steel, E12542 | |
| **Remarks** | | | |
| Remarks | | For further information please see the operating instructions. | |
| Pack quantity | | 1 pcs. | |

## Electrical connection - Ethernet

Connector: M12; coding: D; Sealing: EPDM

| PROFINET X21, X22 | |
|---|---|
| 1 | TX + |
| 2 | RX + |
| 3 | TX - |
| 4 | RX - |
| 5 | not used |

| IoT X23 | |
|---|---|
| 1 | TX + |
| 2 | RX + |
| 3 | TX - |
| 4 | RX - |
| 5 | not used |

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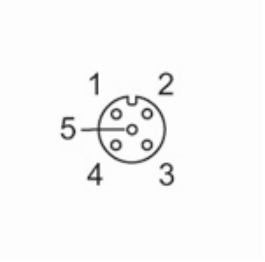
## Electrical connection - Process connection

Connector:  M12; coding: A; Sealing: EPDM




| IO-Link Port Class A X01...X08 | |
|---|---|
| 1 | Sensor supply (US) L+ |
| 2 | digital input |
| 3 | Sensor supply (US) L- |
| 4 | C/Q IO-Link |
| 5 | not used |

## Electrical connection - power supply

Connector:  M12; coding: A

| X31 | |
|---|---|
| 1 | + 24 V DC (US) |
| 2 | not used |
| 3 | GND (US) |
| 4 | not used |