

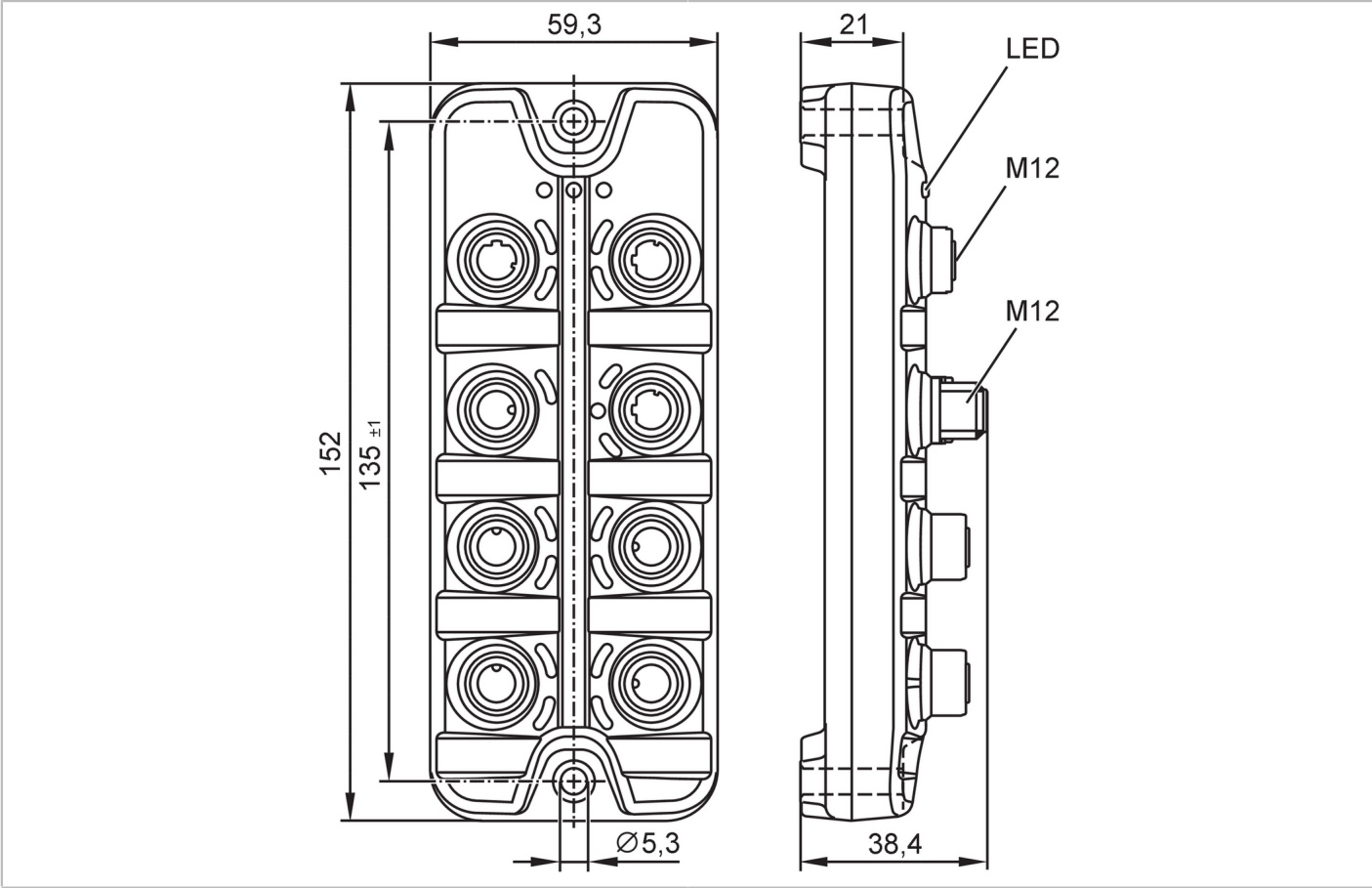
AL1321



IO-Link master with EtherNet/IP interface

IO-Link Master DL EIP 4P IP69K

Alternative articles: AL1325  
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                                                       |
| Sensor supply US                   |      |                                                           |
| Max. current load total            | [A]  | 3.6                                                       |
| Inputs / outputs                   |      |                                                           |
| Total number of inputs and outputs |      | 8; (configurable)                                         |
| Number of inputs and outputs       |      | Number of digital inputs: 8; Number of digital outputs: 4 |
| Inputs                             |      |                                                           |
| Number of digital inputs           |      | 8; (IO-Link Port Class A: 4 x 2)                          |
| Switching level high               | [V]  | 11...28                                                   |
| Switching level low                | [V]  | 0...5                                                     |



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|                                                 |                                                                                       |                         |
|-------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------|
| Digital inputs protected against short circuits | yes                                                                                   |                         |
| Outputs                                         |                                                                                       |                         |
| Number of digital outputs                       | 4; (IO-Link Port Class A: 4 x 1)                                                      |                         |
| Max. current load per output [mA]               | 300                                                                                   |                         |
| Short-circuit proof                             | yes                                                                                   |                         |
| Interfaces                                      |                                                                                       |                         |
| Communication interface                         | Ethernet; IO-Link                                                                     |                         |
| Ethernet - EtherNet/IP                          |                                                                                       |                         |
| Transmission standard                           | 10Base-T; 100Base-TX                                                                  |                         |
| Transmission rate                               | 10 MBit/s; 100 MBit/s                                                                 |                         |
| Protocol                                        | EtherNet/IP                                                                           |                         |
| Factory settings                                | IP address: 192.168.1.250                                                             |                         |
|                                                 | subnet mask: 255.255.255.255                                                          |                         |
|                                                 | gateway IP address: 0.0.0.0                                                           |                         |
|                                                 | MAC address: see type label                                                           |                         |
| Note on interfaces                              | DHCP, BOOTP, static                                                                   |                         |
|                                                 | DLR (Device Level Ring)                                                               |                         |
|                                                 | 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                              | Safety 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                         | 4                                                                                     |                         |
| 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                                                                          |                         |



## IO-Link master with EtherNet/IP interface

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|                      |                           |  |
|----------------------|---------------------------|--|
| 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]         | 95                        |  |

## Mechanical data

|                  |                                                           |
|------------------|-----------------------------------------------------------|
| Weight [g]       | 283.5                                                     |
| Housing          | rectangular                                               |
| Type of mounting | Backplane mounting                                        |
| Dimensions [mm]  | 152 x 59.3 x 38.4                                         |
| Material         | housing: PA grey; Socket: stainless steel (1.4404 / 316L) |
| Sealing material | EPDM                                                      |

## Accessories

|                |                                                  |
|----------------|--------------------------------------------------|
| Items supplied | Protective cap: 1 x M12, stainless steel, E12542 |
|----------------|--------------------------------------------------|

## Remarks

|               |                                                 |
|---------------|-------------------------------------------------|
| Remarks       | Further information is available in the manual. |
| Pack quantity | 1 pcs.                                          |

## Electrical connection - Ethernet

Connector: 3 x M12; coding: D; Contacts: 4; sealing: EPDM



## EtherNet/IP X21, X22

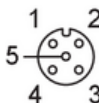
|   |          |
|---|----------|
| 1 | TX +     |
| 2 | RX +     |
| 3 | TX -     |
| 4 | RX -     |
| 5 | not used |

## IoT X23

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

## Electrical connection - IO-Link

Connector: 4 x M12; coding: A; Contacts: 4; sealing: EPDM



## IO-Link Port Class A X01...X04

|   |                       |
|---|-----------------------|
| 1 | Sensor supply (US) L+ |
| 2 | Digital input         |
| 3 | Sensor supply (US) L- |
| 4 | C/Q IO-Link           |
| 5 | not used              |

# AL1321



## IO-Link master with EtherNet/IP interface

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### Electrical connection - voltage supply IN

Connector: 1 x M12; coding: A; Contacts: 4; sealing: EPDM



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