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| 381166719                 | <b>DATA SHEET</b>                     |  |
| Valid from:<br>10.02.2025 | <b>UNITRONIC ACCESS IOL08DIO08DIO</b> |   |

## Description

- IO-Link I/O Hub
- industrial metal housing, up to IP69
- 16 digital in-/output channels
- 8 x M12 A-coded I/O connection, 5-poles
- 1 x M12 A-coded IO-Link Class A connection, 5-poles




## General characteristics

|   |   |
|---|---|
| Device Type                               | IO Link Hub                                       |
| Protocol                                  | IO-Link   |
| I/O Function                              | 16 DIO  |
| Power-/Bus Connection                     | M12, 5-poles, A-coded, male                       |
| I/O Connection                            | M12, 5-poles, A-coded, female                     |
| I/O Type                                  | Digital Input/Output (Universal)                  |
| Protection Degree / IP Rating             | IP65 / 67 / 69                                    |
| Ambient Temperature (Operation)           | -40 °C to 70 °C                                   |
| Ambient Temperature (Storage/Transport)   | -40 °C to 85 °C                                   |
| Permissible Humidity (Operation)          | 5 % ... 95 % (For UL applications max. 80 %)      |
| Permissible Humidity (Storage/Transport)  | 5 % ... 95 % (For UL applications max. 80 %)      |
| Air Pressure (Operation)                  | 80 kPa ... 106 kPa (up to 2000 m above sea level) |
| Air Pressure (Storage/Transport)          | 80 kPa ... 106 kPa (up to 2000 m above sea level) |
| Protection Class                          | III, IEC 61140, EN 61140, VDE 0140-1              |
| Pollution Degree                          | 3 acc. to EN 60664-1, VDE 0110-1                  |
| Mean Time To Failure (MTBF) @ 20°C        | 5528252 h   |
| Fastening Torque (Fixing Screw)           | M4: 1 Nm  |
| Fastening Torque (Ground Connection (FE)) | M4: 1 Nm  |
| Fastening Torque (Bus/Power Connection)   | M12: 0.5 Nm                                       |
| Fastening Torque (I/O Connection)         | M12: 0.5 Nm                                       |

## Variation

| Article   | Description                    | Amount of IO Ports |
|-----------|--------------------------------|--------------------|
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### Power and interfaces requirements

|                                    |                                       |
|------------------------------------|---------------------------------------|
| Connection Module Supply Voltage   | M12 Power, 5-poles, A-coded (IO-Link) |
| Number of Connections              | 1                                     |
| Module Supply Voltage              | 24 V DC (20-30VDC) (SELV/PELV)        |
| Current consumption (typ.)         | 80 mA (at 24VDC)                      |
| Connection Sensor Supply Voltage   | M12, 5-poles, A-coded                 |
| Reverse Polarity Protection        | Yes                                   |
| Status Indicator (Actuator Supply) | LED green                             |
| Diagnostic Indicator               | LED red                               |

### Physical properties

|                         |  |
|-------------------------|--|
| Housing Material        | Metal, zinc die-cast   |
| Housing Plating         | Nickel, matt   |
| Housing Color           | Grey Metallic  |
| Potted                  | Yes  |
| Weight                  | 380 g  |
| Contact Base Material   | M12, A-coded, CuSn, Gold-plated  |
| Contact Bearer Material | PA   |
| O-Ring Material         | FKM  |
| Mounting                | 2 hole screw mounting. Use standard M4 x 25 / 30 screws with toothed lock washer (as per DIN 125) and self-locking nuts. |

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## IO Links

|                          |   |
|--------------------------|---|
| IO-Link Class            | Class A                                 |
| Connection               | M12, 5-poles, A-coded                   |
| Supported COM Modes      | 230.4 kBaud (COM 3)                     |
| Cycle Time / Update Rate | min. 2 ms                               |
| Parameter Storage        | Supported                               |
| Frame Type               | Type_2_V                                |
| Process Data Length      | 4 Bytes Input Data, 4 Bytes Output Data |
| Configuration            | IODD, Process Data                      |


## Digital Input Channels

|                                    |   |
|------------------------------------|---|
| Number of Digital Input Channels   | max. 16, universal                            |
| Connection                         | M12, 5-poles, A-coded, female                 |
| Number of Ports                    | 8x, X1 to X8                                  |
| Channel Type                       | Type 1 acc. to IEC 61131-2                    |
| Input Wiring                       | 2-, 3-wire                                    |
| Nominal Voltage                    | 24 V DC via US (module power supply)          |
| Nominal Current                    | typ. 5 mA                                     |
| Sensor Current Supply              | max. 500 mA per port at 25°C                  |
| Sensor Type                        | PNP   |
| Input Voltage Range "0" signal     | -3 V DC ...+5 V DC                            |
| Input Voltage Range "1" signal     | 15 V DC ... 30 V DC                           |
| Input filter time                  | 0 to 3 ms, configurable                       |
| Protective Circuit: Electronically | Overload protection, short-circuit protection |
| Status Indicator (Inputs)          | LED white or yellow per channel               |
| Diagnostic Indicator               | LED red per module                            |

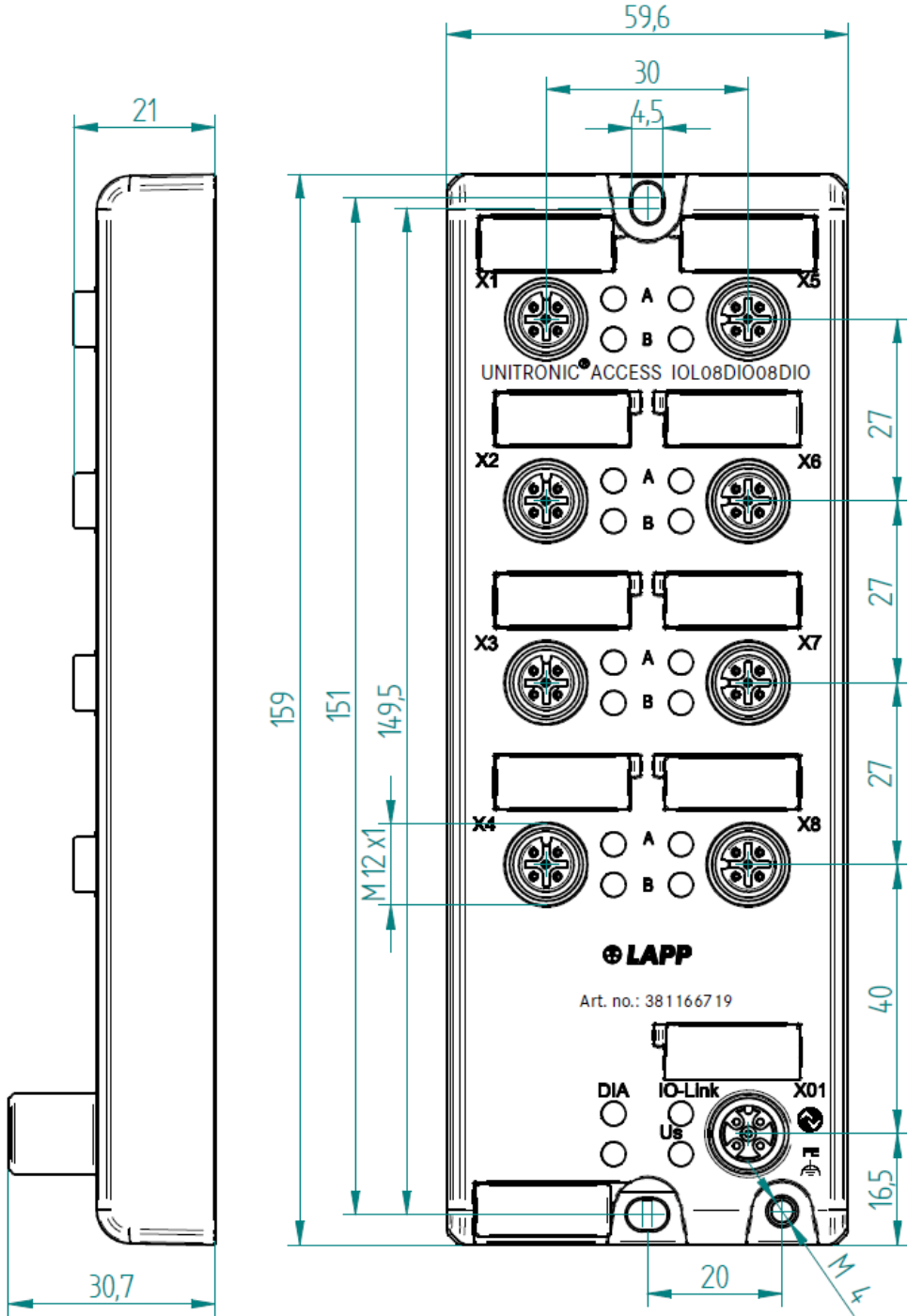
## Digital Output Channels

|                                    |   |
|------------------------------------|---|
| Number of Digital Output Channels  | up to 16, universal                           |
| Connection                         | M12, 5-poles, A-coded, female                 |
| Number of Ports                    | 8x, X1 to X8                                  |
| Channel Type                       | p-switching                                   |
| Output Wiring                      | 2-, 3-wire                                    |
| Output Current per Channel         | max. 350 mA                                   |
| Output Current per Module          | max. 4 A                                      |
| Galvanically Isolated              | No  |
| Protective Circuit: Electronically | Overload protection, short-circuit protection |
| Overload Behavior                  | Auto off and on switching / Manual restart    |
| Status Indicator (Outputs)         | LED white or yellow per channel               |
| Diagnostic Indicator               | LED red per module                            |

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**Technical drawing**



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### Standards and approvals

EMC

EN IEC 61000-6-2: 2019  
EN IEC 61000-6-4: 2019  
IEC 61131-2: 2017

Approvals

CE  
UL (E331560)  
IO-Link

### Application range

Automation, industrial machinery and plant engineering

### Note

Do not connect / disconnect system power supply under voltage!

Photographs are not true to scale and do not represent detailed images of the respective products.

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