lumbergautomation
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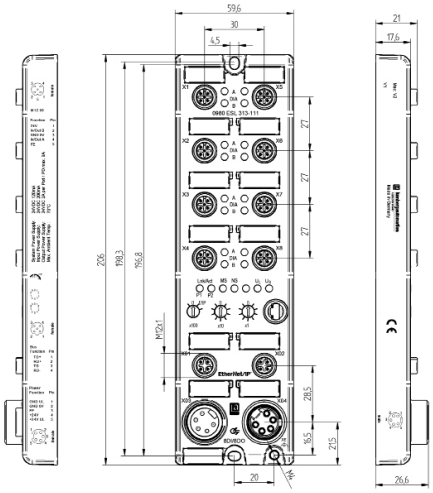
# LioN-Power Active I/O M12, 7/8" Power, EtherNet/IP, 8DI/8DO



| Type | 0980 ESL 313-111 |
|---|---|
| Product Description | LioN-P EtherNet/IP device, 8 digital input and 8 digital output channels with galvanic isolation, M12 LAN connection, 4-poles, D-coded, 7/8" power supply, 5-poles |

| Diagnostic indiction | | |
|---|---|---|
| **LED** | **Indication** | **Condition** |
| **1…8 A** | Yellow | Channel status |
| **1…8 DIA A** | Red | Peripheral fault |
| **1…8 B** | White | Channel status |
| **1…8 DIA B** | Red | Peripheral fault |
| **P1 Lnk/Act** | Green | Connection to an Ethernet subscriber |
| | Green blinking | IO device is in data exchange |
| | Off | No connection to another subscriber |
| **P2 Lnk/Act** | Green | Connection to an Ethernet subscriber |
| | Yellow blinking | IO device is in data exchange |
| | Off | No connection to another subscriber |
| **MS (Module Status)** | Green | Module is ready |
| | Green blinking | Incorrect Configuration |
| | Red-Green blinking | Self-test is carried out |
| | Red blinking | Firmware update |
| | Off | Device is switched off |
| **NS (Network Status)** | Green blinking | IP address present |
| | Green | Connection to master is present |
| | Red | At least one connection has timed out |
| | Red blinking | IP address is already used by another device |
| | Red-Green blinking | Self-test is carried out |
| | Off | Device is switched off |
| **$U_s$** | Green | Voltage 19V <=$U_s$<= 30V |
| | Red | $U_s$ Voltage < 19V or $U_s$> 30V |
| **$U_L$** | Green | Voltage 19V <=$U_L$<= 30V |
| | Red | $U_L$ Voltage < 19V or $U_L$> 30V |

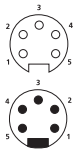
| Bit assignment | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Bit** | **7** | **6** | **5** | **4** | **3** | **2** | **1** | **0** |
| | | | | **Input Data: 8DI** | | | | |
| **Byte 0** | 4B | 4A | 3B | 3A | 2B | 2A | 1B | 1A |
| | | | | **Output Data: 8DO** | | | | |
| **Byte 1** | 8B | 8A | 7B | 7A | 6B | 6A | 5B | 5A |

## Pin assignment

**M12 I/O port, A-coded**

1 = +24V
2 = In/Out B
3 = GND 0V
4 = In/Out A
5 = FE

**4 pole picture**




1 = GND UL
2 = GND 0V
3 = FE
4 = +24V
5 = +24V UL

**M12 EtherNet/IP, D-coded**

1 = TD+
2 = RD+
3 = TD-
4 = RD-

| Part number | Order number |
|---|---|
| 0980 ESL 313-111 | 934880003 |

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# LioN-Power Active I/O M12, 7/8" Power, EtherNet/IP, 8DI/8DO

| Technical Data | |
|---|---|
| **Environmental Temperature** | -20° C to +70° C (Operation) |
| **Housing Material** | Metal Zinc Die-cast |
| **Contact Bearer** | PA/TPU |
| **Contact** | M12 A, D-coded CuSn, Gold-plated<br>7/8" CuZn, Gold-plated |
| **O-ring** | FKM |
| **Mechanical Data** | |
| **Weight** | 520 g |
| **Protection Class (IEC 60529)** | IP65, IP67 (only if mounted and locked in combination with Hirschmann/Lumberg connector) |
| **Module Supply** | |
| **Rated Voltage** | 24V DC |
| **Voltage Range** | 19 to 30V DC |
| **Nominal Current** | 9 A |
| **Connection Type** | 7/8" power connector, 5 poles |
| **Number** | 2 |
| **Bus-System** | |
| **Network** | EtherNet/IP |
| **Transmission Rate** | 10/100 Mbit/s |
| **Address Range** | 0 to 255 |
| **Connection Type** | M12 LAN connection, 4 poles, D-coded |
| **Number** | 2 |
| **Outputs** | |
| **Number of Digital Channels** | 8 |
| **Actoric Current** | 2 A per channel |
| **Actoric Current (max.)** | 9 A |
| **Short-circuit Proof** | yes |
| **Channel Type N.O.** | p-switching |
| **Status Indicator** | LED white or yellow per channel |
| **Diagnostic Indicator** | LED red per port |
| **Inputs** | |
| **Number of Digital Channels** | 8 |
| **Type** | Type 3 acc. IEC 61131-2 |
| **Sensor Type** | PNP |
| **Status Indicator** | LED white or yellow per channel |
| **Diagnostic Indicator** | LED red per port |
| **Sensor Current Supply** | 200 mA per port |

The application of these products in harsh environments should always be checked before use.

Specifications subject to alteration.

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