# IO-Link master

## ICE2-8IOL1-G65L-V1D

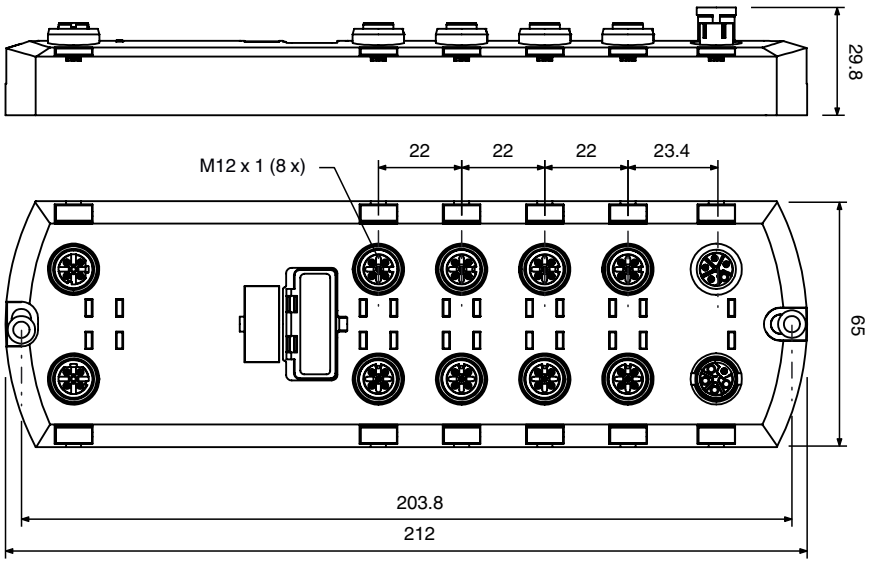
- Provides 4 Class A and 4 Class B IO-Link ports
- Web-based configuration of module and IO-Link devices
- Integrated IODD storage for more than 100 IODDs
- Downloadable module configuration
- M12 L-coded power connector
- EtherNet/IP, Modbus/TCP, OPC UA, and MQTT support

EtherNet/IP and Modbus IO-Link master with 4 x IO-Link Class A and 4 x IO-Link Class B ports

## Function

The module is an EtherNet/IP fieldbus module with 4 type A IO-Link master ports and 4 type B IO-Link master ports according to IO-Link standard V1.1. The fieldbus module serves as an interface between the controller of an EtherNet/IP fieldbus system and IO-Link devices in the field level. The integrated web server and IODD interpreter enabling complete configuration of the fieldbus module and attached IO-Link devices without the need for special software tools. Information regarding the status of the module is also displayed and network parameters such as the IP address and subnet mask can be configured. The module is capable of storing all configuration enabling stand-alone usage without a higher level PLC. MutliLink simultaneously provides data access via different communication protocols like EtherNet/IP, Modbus/TCP, OPC UA and MQTT to multiple controllers. An L-coded M12 connector plug used for supplying power enables a current rating of up to 2 x 16 A. The inputs and outputs are equipped with A-coded M12 connector plugs. Connection to the fieldbus is achieved using a D-coded M12 connector plug. Status information for each channel is displayed via LEDs as a diagnostic function.

## Dimensions




## Technical Data

| | |
|---|---|
| **General specifications** | |
| UL File Number | E360395 |
| **Indicators/operating means** | |
| LED indication | see manual |

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## Technical Data

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|---|---|---|
| Rotary switch | | Setting the IP address |
| **Electrical specifications** | | |
| Rated operating voltage | $U_e$ | 20 ... 30 V DC |
| General information | | M12, L-coded |
| Protection class | | PELV or Limited Voltage power supply required |
| Nominal voltage | $U_N$ | 24 V DC |
| Current consumption | | typ. 120 mA |
| Current loading capacity | | Max. 2 x 16 A per module<br>(Loop-through current via L-coded power supply)<br>Total current: max. 6.5 A per module (Class A)<br>Total current: max. 10.4 A per module (Class B) |
| Galvanic isolation | | between US and UA |
| **Interface 1** | | |
| Interface type | | Industrial Ethernet |
| Physical | | M12, D-coded |
| Protocol | | EtherNet/IP + Modbus TCP + OPC UA + MQTT (including Sparkplug B support)<br>Modbus max PDI: 33 times / sec<br>OPC UA max PDI update rate: 20 times / sec<br>MQTT max PDI update rate: 10 times / sec |
| Transfer rate | | 10/100 Mbps |
| **Inputs/Outputs** | | |
| Number/Type | | 4 x IO-Link Class B (X1 - X4) and 4 x IO-Link Class A (X5 - X8) Configurable as: Class 2, , PELV or Limited Voltage power supply required max. 12 digital inputs and digital outputs<br>short-circuit protected |
| Sensor supply | | Ports 1 - 8: max. 500 mA per port via L+ (pin 1) |
| Actuator supply | | Port 1: max. 3.5A via 2L+ (pin 2)<br>Ports 2-4: max. 2.3A via 2L+ (pin 2) |
| **Directive conformity** | | |
| Electromagnetic compatibility | | |
| Directive 2014/30/EU | | EN 61000-6-2 , EN 61000-6-4 |
| RoHS | | EN IEC 63000:2018 |
| **Standard conformity** | | |
| Degree of protection | | EN 60529 |
| Fieldbus standard | | IEC 61131-2 |
| Electrical safety | | CSA C22.2 No. 61010-1-12<br>UL 61010-1, IEC 61010-2-201 |
| Emitted interference | | EN 61000-6-4, FCC Part 15 Subpart B, ICES-001, AS/NZS CISPR 11 |
| Noise immunity | | EN 61000-6-2 , EN 61131-2 , EN 61131-9 |
| Shock resistance | | EN 60068-2-27 |
| **Ambient conditions** | | |
| Operating temperature | | -25 ... 70 °C (-13 ... 158 °F) |
| Storage temperature | | -40 ... 85 °C (-40 ... 185 °F) |
| Relative humidity | | max. 95 % |
| Altitude | | 0 ... 2000 m |
| Shock and impact resistance | | 15g, 11ms, half-sine |
| **Mechanical specifications** | | |
| Degree of protection | | IP67 |
| Connection | | Power Supply M12, L-coded<br>Fieldbus M12, D-coded<br>Inputs/Outputs M12, A-coded |
| Material | | |
| Housing | | Molded Polyamide 66 |
| Mass | | 454 g |
| Tightening torque, fastening screws | | 8 Nm |
| Tightening torque, cable gland | | 0.6 Nm |
| Dimensions | | 65 mm 29.8 mm 212 mm |
| Height | | 212 mm |

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## Technical Data

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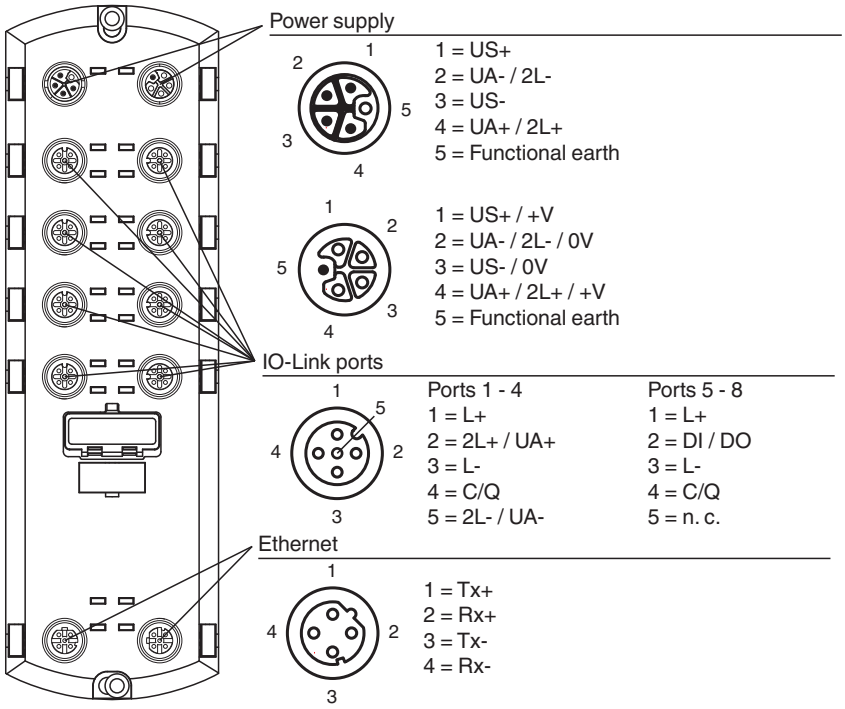
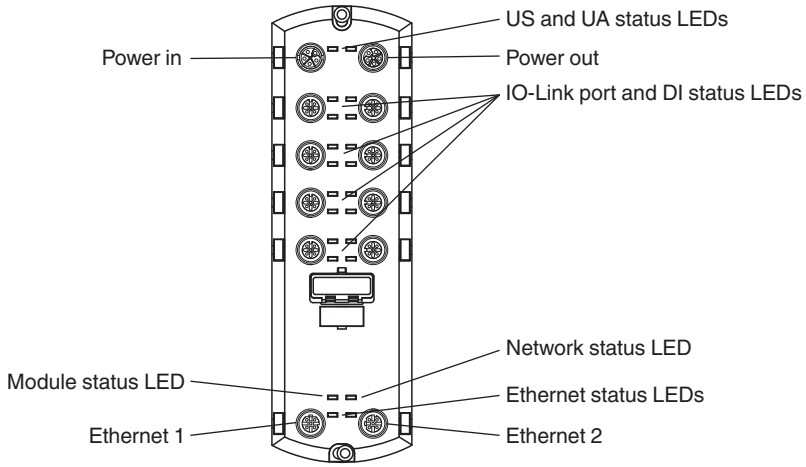
|---|---|
| Width | 65 mm |
| Length | 30 mm |
| Mounting | Machine or panel |

## Connection




## Assembly

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