

## IO-Link master

### ICE11-8IOL1-G60L-V1D

- 4x IO-Link ports, Class A and 4x IO-Link ports, Class B
- Multiprotocol-compatible
- M12 power connector, L-coded
- Sturdy metallic housing
- Web-based configuration
- Extended temperature range

Ethernet IO-Link module with 4x Class A and 4x Class B IO-Link ports



## Function

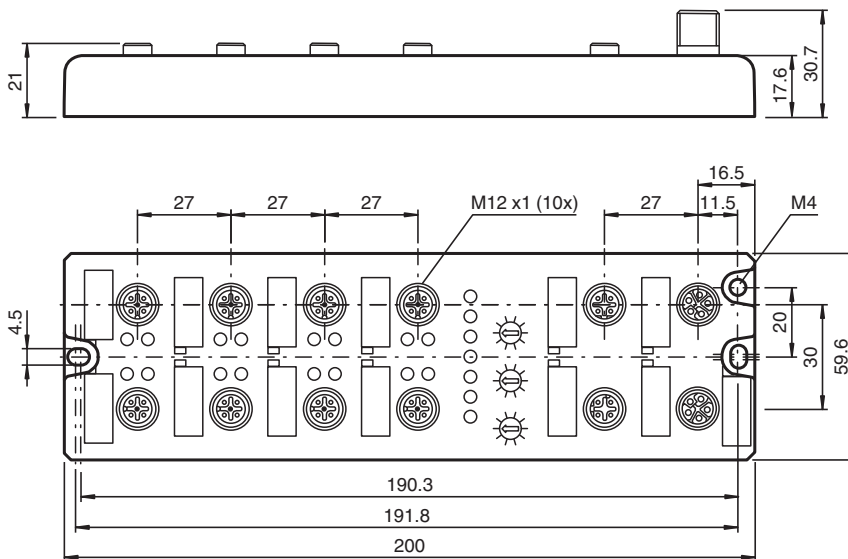
The module is a multiprotocol fieldbus module with 4 x IO-Link ports Class A and 4 x IO-Link ports Class B according to IO-Link standard V1.1.3. The G60L design in fully cast metal housing is resistant to mechanical damage and environmental influences. The G60L has protection class IP65/IP67.

The fieldbus module serves as an interface between the controller of a fieldbus system and the field level. Due to its multiprotocol capability, the fieldbus module supports the Ethernet communication protocols PROFINET, EtherNet/IP, EtherCAT, CC-Link, and MODBUS TCP.

An L-coded M12 connector plug used for supplying power enables a current rating of up to 2 x 16 A via  $U_S$  and  $U_{AUX}$ . 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.

The communication protocols are configured either manually via a rotary switch or automatically. The diagnostics display status information for each channel via LEDs. An integrated web server enables access to the fieldbus module. Information regarding the status of the module is also displayed and network parameters such as the IP address and subnet mask can be configured.

## Dimensions



Release date: 2024-07-16 Date of issue: 2024-07-16 Filename: 70176031\_eng.pdf

## Technical Data

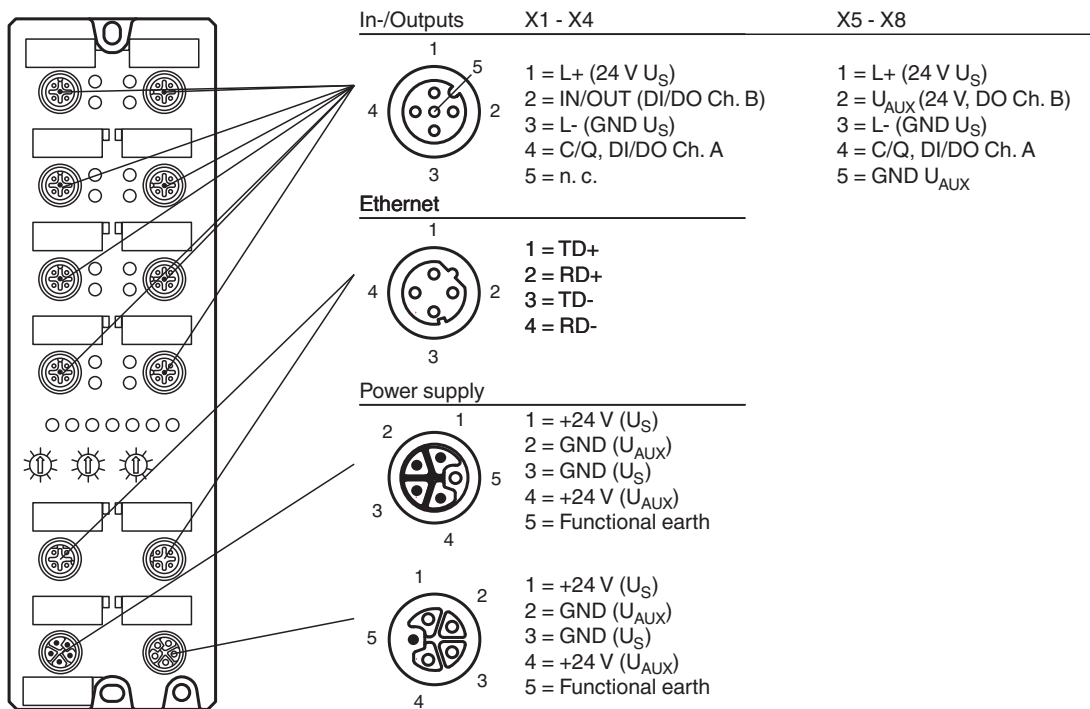
<b>General specifications</b>		
UL File Number		E223772
<b>Indicators/operating means</b>		
LED indication		see manual
Rotary switch		Setting the fieldbus protocol
<b>Electrical specifications</b>		
Rated operating voltage	$U_e$	20 ... 30 V
Nominal voltage		24 V DC (SELV/PELV)
Current consumption		typ. 160 mA $\pm$ 20 % at nominal voltage
Current loading capacity		Max. 2 x 16 A per module max. 9 A via $U_S$ max. 9 A via $U_{AUX}$
<b>Interface</b>		
Interface type		Industrial Ethernet
Physical		M12, D-coded
Protocol		PROFINET IO , EtherNet/IP , EtherCAT® , CC-Link IE Field Basic , MODBUS TCP
Transfer rate		Fast Ethernet 10/100 Mbps , full duplex
<b>Inputs/Outputs</b>		
Number/Type		4 x IO-Link Class A (X1 - X4) 4 x IO-Link Class B (X5 - X8) configurable as: max. 8 IO-Link and 4 digital inputs/outputs + 4 digital outputs max. 12 digital inputs and 4 digital outputs max. 16 digital outputs short-circuit protected
Sensor supply		max. 4 A per port (X1 - X8) via L+ (pin 1) max. 6.5 A per port pair (X1/X2, X3/X4, X5/X6, X7/X8) max. 5 A per port pair (X1/X2, X3/X4, X5/X6, X7/X8) for UL applications
Output current	$I_e$	max. 500 mA per port (X1 - X8) via C/Q (Ch. A/pin 4) max. 2 A per port (X1 - X8) via DO (Ch. B/pin 2) max. 5 A total current X5 ... X8 via $U_{AUX}$
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 55032
<b>Standard conformity</b>		
Degree of protection		EN 60529:2000
Fieldbus standard		Type 1 according to IEC 61131-2
Shock resistance		EN 61131-2:2004
<b>Approvals and certificates</b>		
UL approval		
Maximum permissible operating current		max. 9 A
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 70 °C (-40 ... 158 °F)
Storage temperature		-40 ... 70 °C (-40 ... 158 °F)
Relative humidity		max. 95 %
Altitude		0 ... 2000 m
Shock and impact resistance		50 g, 11 ms, all axes
Vibration resistance		15 g at 5 - 500 Hz
Pollution degree		3
<b>Mechanical specifications</b>		
Contact elements		PA
Degree of protection		IP65/IP67/IP69K
Connection		Power Supply M12, L-coded Fieldbus M12, D-coded Inputs/Outputs M12, A-coded
Material		
Contacts		CuSn, gold-plated CuNi, gold-plated
Housing		Diecast zinc

Release date: 2024-07-16 Date of issue: 2024-07-16 Filename: 70176031\_eng.pdf

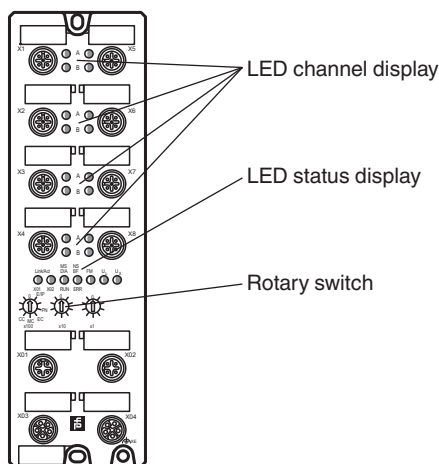
**Technical Data**

Seal	FKM
Mass	480 g
Tightening torque, fastening screws	1 Nm
Tightening torque, cable gland	0.5 Nm
<b>Dimensions</b>	
Height	200 mm
Width	59.6 mm
Length	21 mm
Construction type	Field housing
Tightening torque of clamping screws	0.5 Nm

**Connection**



**Operation**



Release date: 2024-07-16 Date of issue: 2024-07-16 Filename: 70176031\_eng.pdf