Dimensions
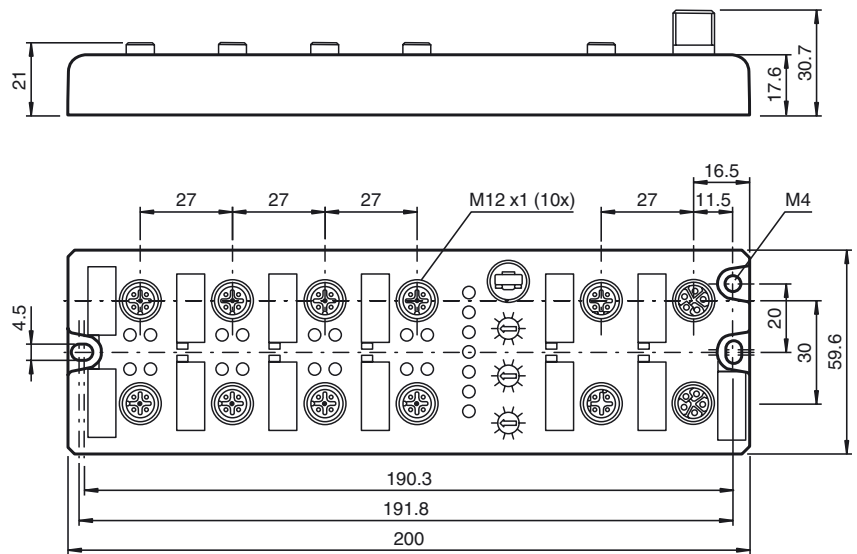

Model number

ICE1-8IOL-G60L-V1D

Ethernet IO-Link module with 8 inputs/outputs

Features

- Multiprotocol-compatible
- M12 power connector
- Sturdy metallic housing
- Web-based configuration

Function

The module is a multiprotocol fieldbus module with 4 type A and 4 type B IOLink master ports according to IO-Link standard V1.1.
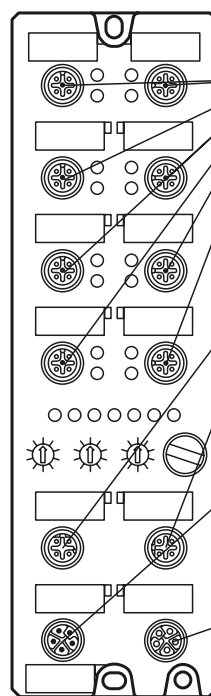
The design in fully cast metal housing is resistant to mechanical damage and due to its high degree of protection to environmental influences.

The fieldbus module serves as an interface between the controller of a fieldbus system and the field level. Thanks to its multiprotocol capability, the fieldbus module supports the Ethernet communication protocols PROFINET and EtherNet/IP.

An L-coded M12 connector plug used for supplying power enables a current rating of up to 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.

The communication protocols are configured either manually via a rotary switch or automatically. Status information for each channel is displayed via LEDs as a diagnostic function. 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.
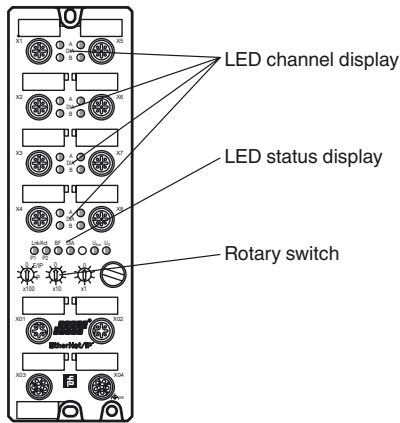
Electrical connection

In-/Outputs

	X1 - X4	X5 - X8
1	1 = L+ (24 V U_S)	1 = L+ (24 V U_S)
2	2 = In$_{-x}$(DI Ch. B)	2 = U_{Aux}(+24 V, DO Ch. B)
3	3 = L- (GND U_S)	3 = L- (GND U_S)
4	4 = C/Q	4 = C/Q
5	5 = n. c.	5 = GND_U_{Aux}

Ethernet

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

Power supply

1 = +24 V (U_S)
2 = GND (U_{Aux})
3 = GND (U_S)
4 = +24 V (U_{Aux})
5 = Functional earth

1 = +24 V (U_S)
2 = GND (U_{Aux})
3 = GND (U_S)
4 = +24 V (U_{Aux})
5 = Functional earth

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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PEPPERL+FUCHS
SENSING YOUR NEEDS

1

Indicating / Operating means

- LED channel display
- LED status display
- Rotary switch

Technical data

General specifications		
UL File Number		E223772
Indicators/operating means		
LED indication		see manual
Rotary switch		Setting the fieldbus protocol
Electrical specifications		
Rated operating voltage	U_e	18 ... 30 V
Nominal voltage		24 V DC
Nominal current		16 A
Current consumption		typ. 200 mA
Current loading capacity		max. 16 A per module (for UL applications, max. 9 A)
Galvanic isolation		between U_S and U_L
Interface 1		
Interface type		Industrial Ethernet
Physical		M12, D-coded
Protocol		PROFINET IO with media redundancy protocol (MRP) EtherNet/IP with Device Level Ring (DLR)
Transfer rate		10/100 Mbps
Inputs/Outputs		
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 Max. 12 digital inputs Max. 12 digital outputs and 4 digital inputs short-circuit protected
Sensor supply		max. 500 mA Per port (X1 - X8)
Output rated operating current	I_e	max. 500 mA Per port (X1 - X8) In addition, a maximum of 2 A per port (X5 – X8)
Directive conformity		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61000-6-2:2005, EN 61000-6-4:2007+A1:2011
Standard conformity		
Degree of protection		EN 60529:2000
Fieldbus standard		Type 1 according to IEC 61131-2
Emitted interference		EN 61000-6-4:2007+A1:2011
Noise immunity		EN 61000-6-2:2005
Ambient conditions		
Ambient temperature		-20 ... 70 °C (-4 ... 158 °F)
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Cold start temperature		-40 °C (-40 °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
Mechanical specifications		
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

Accessories

V15L-G-5M-PUR-U
Single-ended female cordset, M12, L-coded, 5-pin, PUR cable

V15L-G-2M-PUR-U-V15L-G
Cordset, M12 to M12, L-coded, 5-pin, PUR cable

V1SD-G-2M-PUR-ABG-V45-G
Connection cable, M12 to RJ-45, PUR cable 4-pin, CAT5e

V1SD-G-2M-PUR-ABG-V1SD-G
Ethernet bus cable, M12 to M12, PUR cable 4-pin, CAT5e

V1SD-G-ABG-PG9
Cable connector, M12, 4-pin, D-coded, shielded, non pre-wired

V1-G-BK1M-PUR-A-T-V1-G
Y connecting cable, M12 to 2xM12, 4-pin, PUR cable

VAZ-V1-B3
Blind plug for M12 sockets

V1S-T-V1
Y-splitter, M12 connector on M12 socket/socket

ICA-16DI-G60A-IO
I/O hub with IO-Link interface for 16 digital inputs

V15L-G-BK
Single-ended female cordset, M12, L-coded, field attachable

MH V1-SCREWDRIVER
torque screwdriver (0.6 Nm)

MH V1-BIT M12
plug-in cap M12

VAZ-CLAMP-40MM-IO
Signal tower connection element IO-Link with cover

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Housing	Diecast zinc
Seal	FKM
Mass	500 g
Tightening torque, fastening screws	1 Nm
Tightening torque, cable gland	≤ 0.5 Nm
Construction type	Field housing
Tightening torque of clamping screws	0.5 Nm

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