



**Model number**

**ICE1-16DIO-G60L-V1D**

Ethernet IO module with 16 configurable digital inputs/outputs

**Features**

- Multiprotocol-compatible
- M12 power connector
- Sturdy metallic housing
- Web-based configuration
- 16 digital inputs/outputs can be configured

**Function**

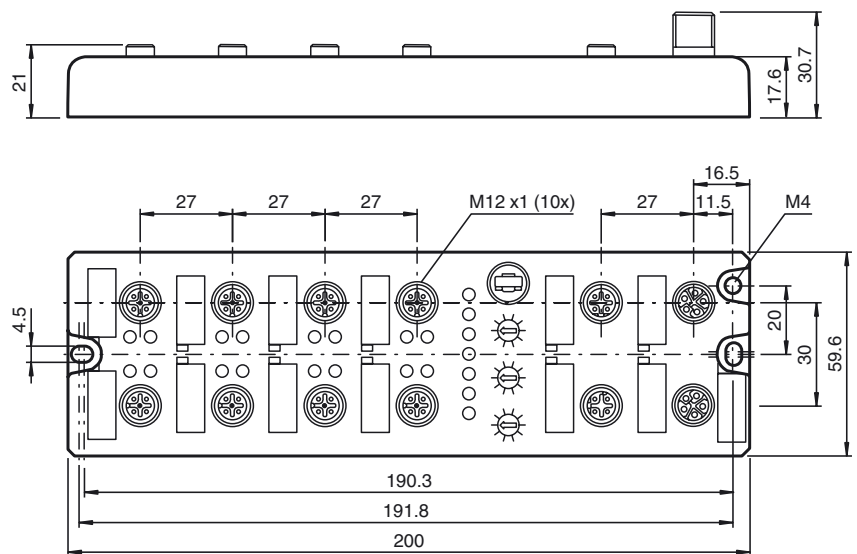
The ICE1-16DIO-G60L-V1D is a multiprotocol fieldbus module with 16 digital in- or outputs. The G60L design in fully cast metal housing is resistant to mechanical damage and environmental influences.

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. Thanks to its multiprotocol capability, the fieldbus module supports the Ethernet communication protocols PROFIBUS, EtherNet/IP, and EtherCAT.

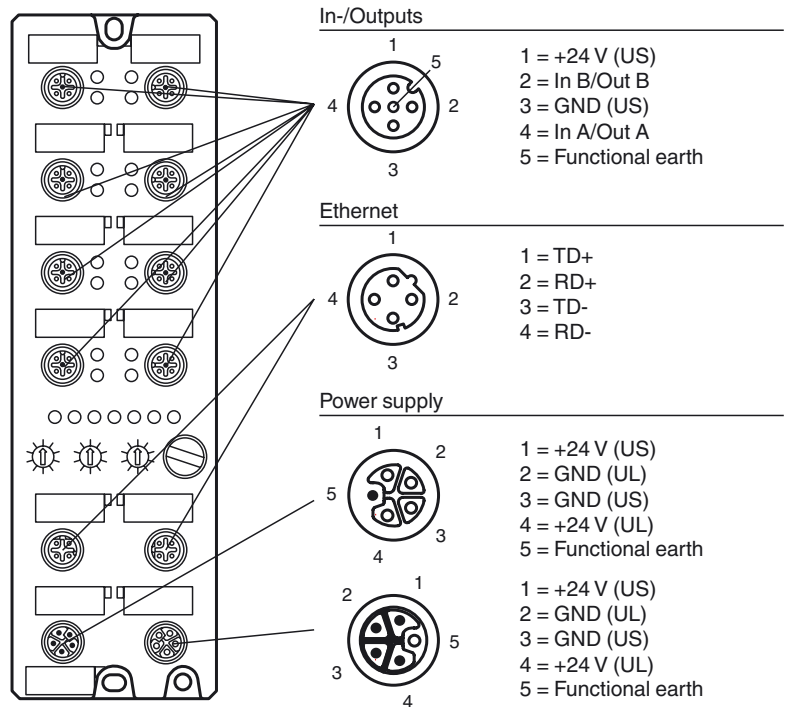
An L-coded M12 connector plug used for supplying power enables a current rating of up to 2 x 16 A. The inputs are equipped with A-coded M12 connector plugs. Connection to the fieldbus is achieved using a D-coded M12 connector plug.

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**

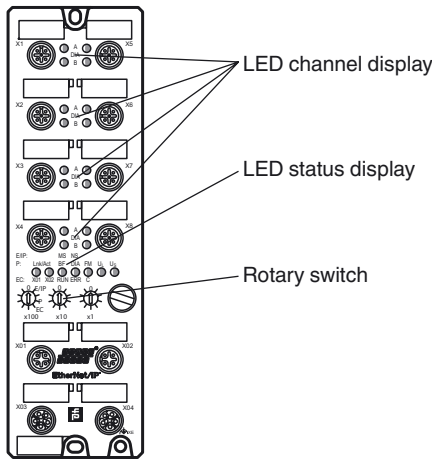


**Electrical connection**



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Indicating / Operating means



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  
 Current consumption 120 mA  
 Current loading capacity Max. 2 x 16 A per module  
 (Loop-through current via L-coded power supply)  
 Total current: max. 9 A per module

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)  
 EtherCAT  
 Transfer rate 10/100 Mb/s

Inputs/Outputs

Number/Type 16 digital inputs/outputs, configurable  
 Inputs: 2-, 3-, 4-wire PNP, DC, supply from  $U_S$   
 Outputs: 2-wire PNP, DC, supply from  $U_L$   
 No galvanic isolation between  $U_S$  and  $U_L$   
 short-circuit protected  
 Sensor supply max. 500 mA Per port (X1 - X8) via  $U_S$   
 Output rated operating current  $I_e$  max. 2 A per channel (X1 - X8) / 4 A Per port via  $U_L$

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  
 Emitted interference EN 61000-6-4:2007+A1:2011  
 Noise immunity EN 61000-6-2:2005  
 Shock resistance EN 61131-2:2004

Ambient conditions

Ambient temperature -20 ... 70 °C (-4 ... 158 °F)  
 Storage temperature -40 ... 70 °C (-40 ... 158 °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 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-0,6M-PUR-U-V15L-G

Cordset, M12 to M12, L-coded, 5-pin, PUR cable

V15L-G-1M-PUR-U-V15L-G

Cordset, M12 to 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-TV1-G

Y connecting cable, M12 to 2xM12, 4-pin, PUR cable

V1S-TV1

Y-splitter, M12 connector on M12 socket/socket

VAZ-V1-B3

Blind plug for M12 sockets

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

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

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