



## Fieldbus module ICE1-16DIO-G60L-V1D

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

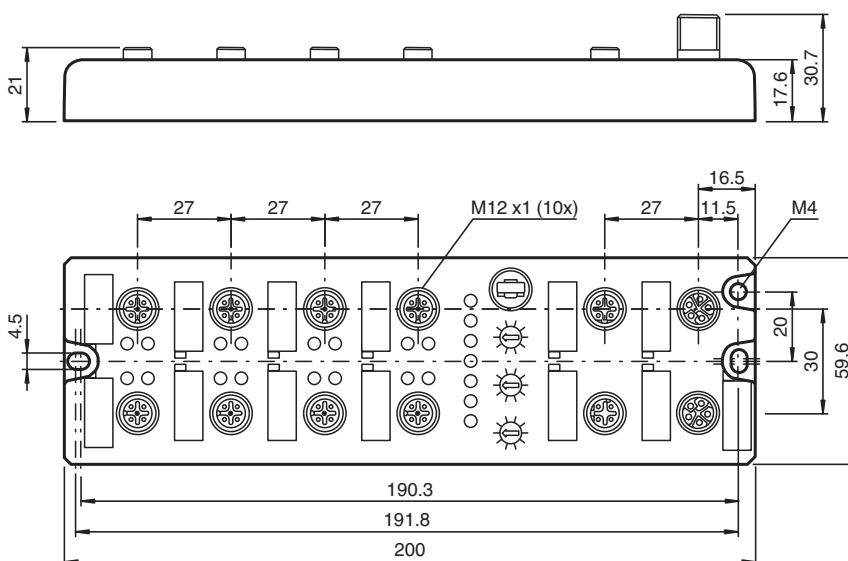
Ethernet IO module with 16 configurable digital inputs/outputs



### 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 PROFINET, 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



Release date: 2023-02-22 Date of issue: 2023-02-22 Filename: 308626\_eng.pdf

## Technical Data

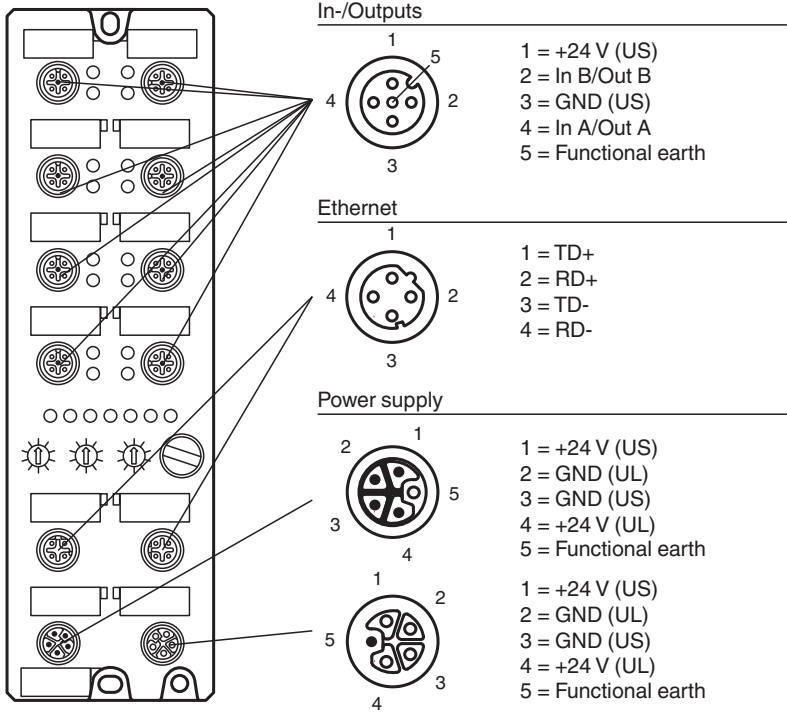
<b>General specifications</b>		
UL File Number		E223772
<b>Indicators/operating means</b>		
LED indication		see manual
Rotary switch		Setting the fieldbus protocol
<b>Electrical specifications</b>		
Rated operating voltage	$U_e$	18 ... 30 V
Nominal voltage		24 V DC
Current consumption		120 mA
Current loading capacity		Max. 2 x 16 A per module (Loop-through current via L-coded power supply) Total current: max. 9 A per module
<b>Interface 1</b>		
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 Mbps
<b>Inputs/Outputs</b>		
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 / 4 A Per port (X1 - X8) via $U_L$
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61000-6-2:2005, EN 61000-6-4:2007+A1:2011
<b>Standard conformity</b>		
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
<b>Ambient conditions</b>		
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
<b>Mechanical specifications</b>		
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
Housing		Diecast zinc
Seal		FKM
Mass		500 g
Tightening torque, fastening screws		1 Nm

Release date: 2023-02-22 Date of issue: 2023-02-22 Filename: 308626\_eng.pdf

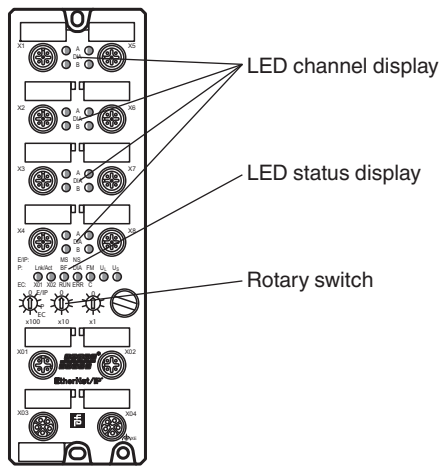
**Technical Data**

Tightening torque, cable gland	0.6 Nm
Construction type	Field housing
Tightening torque of clamping screws	0.5 Nm

**Connection**



**Assembly**













**Accessories**

	<b>V15L-G-2M-PUR-U-V15L-G</b>	Cordset M12 socket straight to M12 plug straight L-coded, 5-pin, PUR cable grey, UL approved
	<b>V15L-G-5M-PUR-U</b>	Female cordset single-ended M12 straight L-coded, 5-pin, PUR cable grey, UL approved

Release date: 2023-02-22 Date of issue: 2023-02-22 Filename: 308626\_eng.pdf

## Accessories

	<b>V15L-G-BK</b>	Female connector M12 straight L-coded 5-pin, for cable diameter 8 - 13 mm, field-attachable
	<b>V1SD-G-GN2M-PUR-E1S-V45-G</b>	Ethernet bus cable M12 plug straight D-coded to RJ45 Ethernet-coded, 4-pin, PUR cable green, Cat5e, shielded, drag chain suitable
	<b>V1SD-G-GN2M-PUR-E1S-V1D-G</b>	Ethernet bus cable M12 plug straight to M12 plug straight D-coded, 4-pin, PUR cable green, Cat5e, shielded, UL approved, drag chain suitable
	<b>V1SD-G-ABG-PG9</b>	Male connector M12 straight D-coded 4-pin, for cable diameter 5 - 8 mm, shielded, field-attachable
	<b>V1S-T-V1</b>	Y-Splitter M12 plug 5-pin to 2x M12 socket 4-pin A-coded
	<b>V1-G-BK1M-PUR-A-T-V1-G</b>	Y connection cable M12 plug straight A-coded 4-pin to 2x M12 socket straight A-coded 4-pin, 2x PUR cable weld spatter resistant black, UL approved, drag chain suitable, torsion resistant
	<b>V1S-G-PG9</b>	Male connector M12 straight A-coded 4-pin, for cable diameter 6 - 8 mm, field-attachable
	<b>VAZ-V1-B3L</b>	Blind plug for M12 sockets
	<b>MH V1-SCREWDRIVER</b>	Torque screwdriver (0.6 Nm)
	<b>MH V1-BIT M12</b>	plug-in cap M12