



Model number

ICE1-16DI-G60L-V1D

Ethernet IO module with 16 digital inputs

Features

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

Function

The ICE1-16DI-G60L-V1D is a multiprotocol fieldbus module with 16 digital inputs.

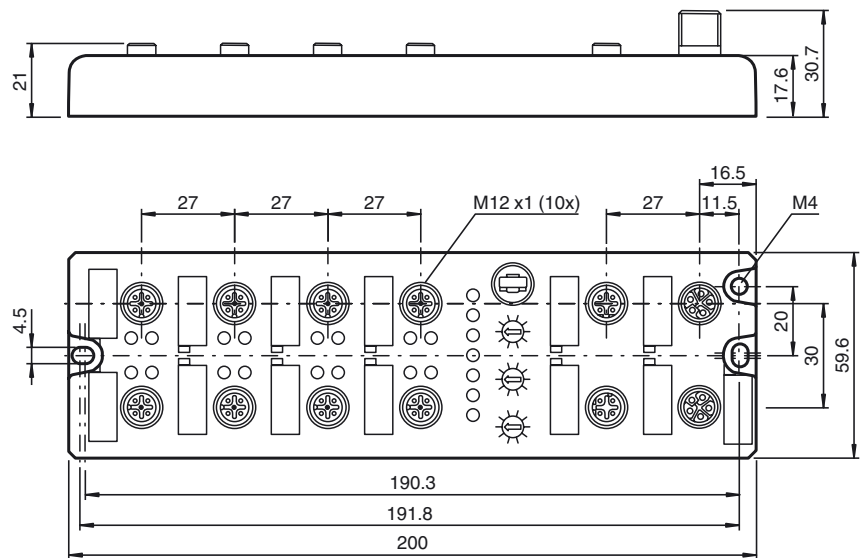
The G60L design in fully cast metal housing is resistant to mechanical damage and environmental influences. The G60L has protection class IP65/IP67.

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.

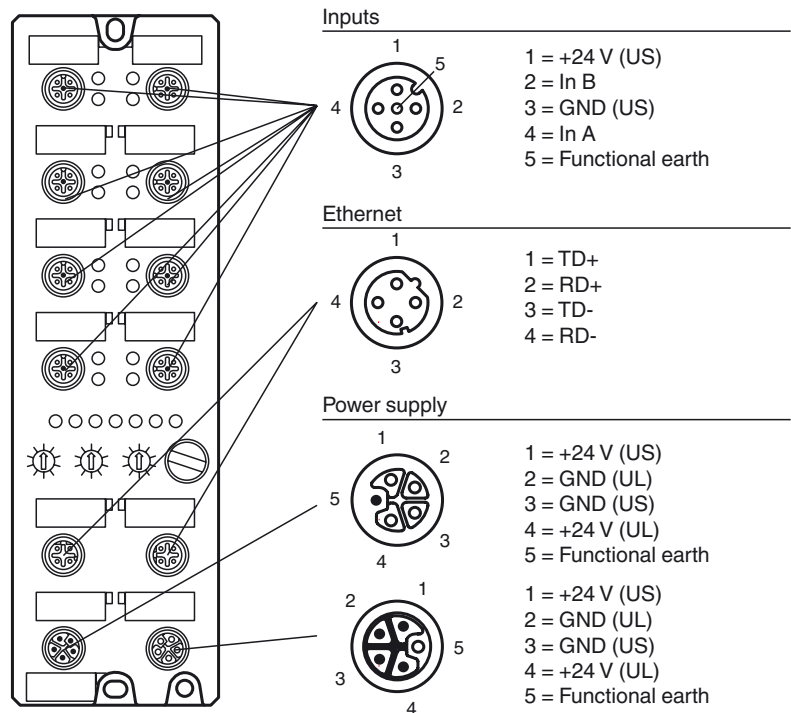
An L-coded M12 connector plug used for supplying power enables a current rating of up to 2 x 16 A. The inputs are equipped with A-coded M12 connector plugs. Connection to the fieldbus is achieved using a D-coded M12 connector plug.

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

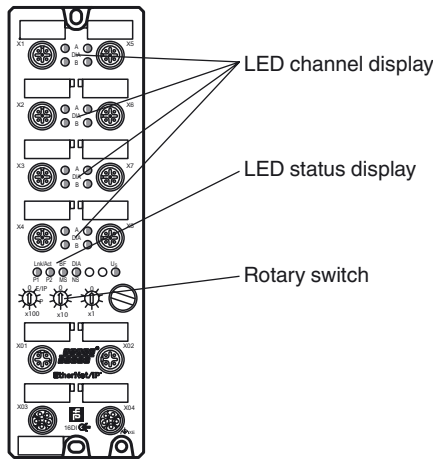


Electrical connection



Release date: 2020-02-06 10:32 Date of issue: 2020-02-06 295311_eng.xml

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 Mbps |

Input

| | |
|---------------|--|
| Input type | 2-, 3-, 4-wire PNP, DC |
| Number/Type | 16 Digital inputs (X1 – X8) short-circuit protected |
| Supply | from U _S |
| Sensor supply | max. 200 mA Per port (X1 - 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 |
| 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 |
| 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 |

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-T-V1-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

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