

# Your automation, our passion.

## Explosion Protection

- Intrinsically Safe Barriers
- Signal Conditioners
- Fieldbus Infrastructure
- Remote I/O Systems
- HART Interface Solutions
- Wireless Solutions
- Level Measurement
- Purge and Pressurization Systems
- Industrial Monitors and HMI Solutions
- Electrical Explosion Protection Equipment
- Solutions for Explosion Protection

## Industrial Sensors

- Proximity Sensors
- Photoelectric Sensors
- Industrial Vision
- Ultrasonic Sensors
- Rotary Encoders
- Positioning Systems
- Inclination and Acceleration Sensors
- Fieldbus Modules
- AS-Interface
- Identification Systems
- Displays and Signal Processing
- Connectivity

Driving standardization.  
Eliminating complexity.  
Maximizing performance.

Ethernet IO Modules



### Decades of Experience, Established Expertise

Pepperl+Fuchs has decades of fieldbus experience, technical expertise, and a deep understanding of factory and process automation. The company is expanding its portfolio offering by introducing new Ethernet IO modules. These modules are the perfect solution for a direct connection from an Ethernet IO module to a higher-level bus system.

With innovative functionality, the modules were intended to simplify communications and provide comprehensive diagnostics to increase plant productivity and lower costs.

Possible target markets for these versatile modules include material handling, automotive, and the process industry. Such target markets often require multiple remote devices that are networked and decentralized from the central control panel.

### Highlights

- All standard Ethernet communication protocols are supported in one single module for optimal machine standardization
- Innovative M12 power connector for reduced installation costs due to higher current capability of 16 A
- Fully encapsulated metal housing: ideally suited for on-machine applications where high shock and vibration resistance need to be considered
- Comprehensive diagnostics available through web server for more transparency and increased process reliability

# Ethernet IO Modules from Pepperl+Fuchs: Efficient, Innovative, and Durable

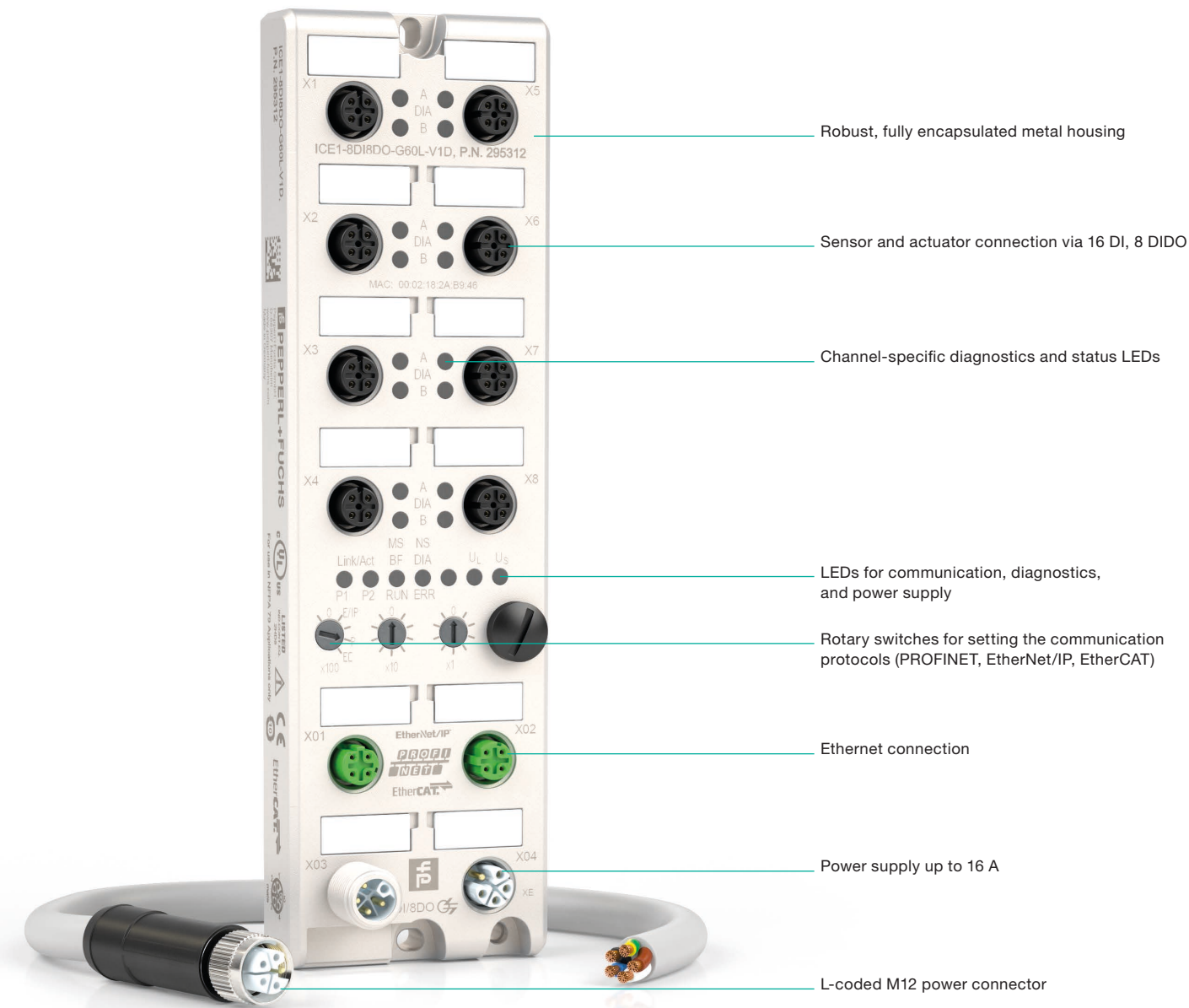
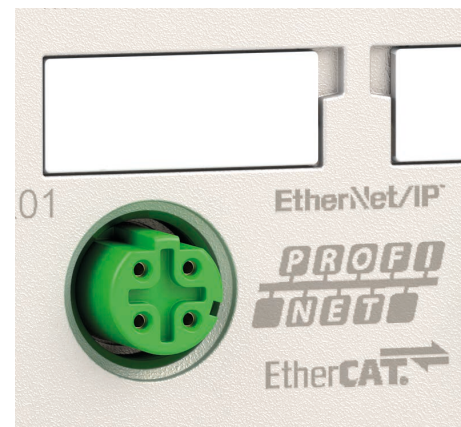
Pepperl+Fuchs' new Ethernet IO modules offer a number of innovative features. With a versatile multi-protocol capability, they provide optimum efficiency for standardizing manufacturing facilities. Comprehensive diagnostics are important for maintaining and troubleshooting your machines. These innovative, high-performance communication modules can help in optimizing your installations.

## Multi-Protocol Solution, Standardized Plant Design

These new modules are interfaces to industrial fieldbus systems. They enable direct Ethernet communications from a PLC in the central control panel to the devices on the factory floor. The multi-protocol capability of the modules offers a key advantage over many other products on the market. One single module supports a variety of Ethernet communication protocols: PROFINET, EtherNet/IP, and EtherCAT. This reduces the number of components needed, which lowers costs and enables standardization in plant design.

## Innovative Communication Technology, Improved Performance

The innovative L-coded M12 connector has a higher current rating of up to 16 A, providing a 70% performance increase compared to 7/8" mini style connectors. As a result, fewer power cables are needed, higher peak loads can be met, and more modules can be daisy-chained together. Another benefit is the general standardization of the compact M12 connection. This is a key advantage for plant operators who value maximum efficiency and uniform system design.

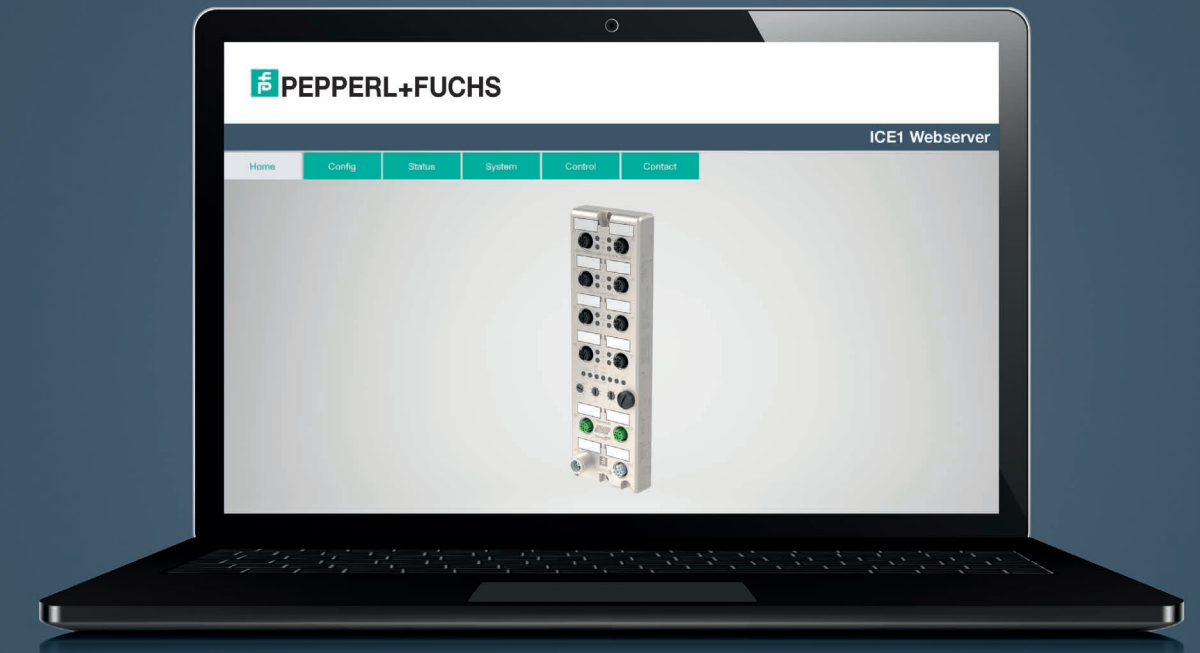


## Rugged Design, Extreme Durability

The rugged design of these modules ensures durability in harsh, industrial environments. The fully encapsulated metal housing is extremely resistant to mechanical damage and environmental factors. It is dust-tight and can withstand both water jets and immersion in water, in accordance with IP65/IP67 standards. The modules also operate in a wide range of temperatures, from -20°C to +70°C, and they are resistant to mechanical vibration (15 g) and shock (50 g).

## Easy Installation, Quick Commissioning

The compact housing allows these modules to be easily integrated into existing applications. They can be mounted directly on the machine or alongside conveyors. It is easy to replace competitor products with these modules via universal mounting adapters. All wiring is done via M12 connectors and simplified by color-coded inserts. Installation errors can be avoided by easily distinguishing data, communication, and power. Communication protocols can be set automatically or manually via rotary switches.



## Quick Diagnostics, Maximum Transparency

The modules maintain maximum process transparency with their comprehensive diagnostic functions. Diagnostic parameters can be monitored directly from the module through a web interface or communicated back to the PLC. An integrated web server allows the user to access the device directly through a web browser, making it possible to view important information and change network parameters such as IP addresses and subnet masks. LEDs are available on the modules, providing continuous status information and enabling channel-specific diagnosis. This increases productivity by allowing faults to be detected and fixed more efficiently.

## Intelligent Solutions, Efficient Processes

Control is programmed directly on the modules. Local control functionality now allows the main cabinet to be turned off, with minimal to no disruption. Smaller, decentralized operations are now possible without any dependency on a remote control panel. This increases productivity and heightens process efficiency.

For example, these modules enable diagnostic parameters such as valve closing times to be monitored. Having the ability to evaluate such parameters directly from the module allows alerts to be sent to remote control panels.



More information and technical data are available at: [www.pepperl-fuchs.com/fieldbusmodules](http://www.pepperl-fuchs.com/fieldbusmodules)