



IO-Link Master

8-EIP

(Ethernet/IP with Modbus TCP) Part Number: 99608-8

and 8-PNIO

(PROFINET IO) Part Number: 99605-7



KEY FEATURES AND BENEFITS

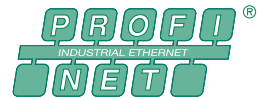
- Rugged IP67 housing designed for harsh environments, M12 connectors allowing up to eight sensor or actuator connections on one master block
- Rotary switches for IP address configuration
- Powerful web GUI for configuration and diagnostics, including: IO-Link device management using the IO-Link device manufacturers IODD file for easy device configuration
- Automatic data storage (upload and download)
- Manual data storage (upload and download)
- Device validation
- Data validation
- Wide operating temperature (-25° to +60°C)
- Additional digital input on every port
- IO-Link V1.1 compatibility
- IO-Link COM1, COM2 and COM3 support (230K baud rate)

EtherNet/IP with Modbus TCP

- MultiLink – Simultaneously provides IO-Link device access to multiple controllers
- EtherNet/IP™ and Modbus TCP access to IO-Link process, event and service data
- EtherNet/IP Class 1 (Implicit) and Class 3 (Explicit) interfaces and provides Write-to-Tag/File and **Read-from-Tag/File support**
- HMI, SCADA, and PLC access to IO-Link ISDU blocks without complex programming
- EDS files and sample programs

PROFINET IO

- PROFINET IO access to IO-Link process, event and service data
- PLC access to IO-Link ISDU blocks without complex programming
- Supports the IOL_CALL function module
- GDSML files



PRODUCT DESCRIPTION

Control Corporation's IO-Link Master combines the benefits of the IO-Link standard with the popular industrial protocols such as EtherNet/IP with Modbus TCP or PROFINET IO by providing a gateway that's a streamlined bridge between the field level sensor network and the industrial backbones, making retrofitting or expansion simple.

The IO-Link Master features a rugged IP67 slim-line design incorporating two Fast Ethernet ports and eight IO-Link ports with Class A M12 connectors. This product is for industrial applications with its machine-mount design using industrial grade components. The IO-Link Master is easily integrated into factory automation networks and is compatible with both IO-Link and digital IO sensor technologies.

IO-LINK MASTER SPECIFICATIONS

HARDWARE

Network Interfaces
10/100BASE-TX

Enclosure
Molded ABS (potted)

Installation and Grounding Method
Machine or panel mount - two-hole M4 or #8 screws

Network Protocols
EtherNet/IP, Modbus/TCP (slave) - 8-EIP (99608-8)
PROFINET IO - 8-PNIO (99605-7)

Connectors (M12)
8 - IO-Link
2 - Ethernet
2 - Power

LED Indicators
Power, Module Status, Network Status, IO-Link, DI and Ethernet Port Link/Activity Status

Dimensions
8.35" x 2.56" x 1.18"
212 x 65 x 30 mm

ETHERNET INTERFACE SPECIFICATIONS

Connector Type
Female, M12 D-coded, 4-pin

Number of Ports
2

Ethernet Specification
10/100BASE-TX

Standards
IEEE 802.3: 10BASE-T
IEEE 802.3u: 100BASE-TX

Auto-MDI/MDI-X
Yes

Auto-Negotiation
Yes

Link Distance
100 m

Cable Types
Twisted pair (Cat 5 or higher)

IPv4 Addressing
Yes

IO-LINK INTERFACE SPECIFICATIONS

Connector Type
Female, M12 A-coded, 5-pin

Number of Ports
8

Transfer Rates
4.8K (COM1)
38.4K (COM2)
230.4K (COM3)

Baud Rate Recognition
Automatic

DIGITAL INPUTS

(SIO Mode Using IO-Link Ports)

Connector Type
Female, M12 A-coded, 5-pin

Number of Ports
8

Input Characteristics
IEC 61131-2 Type 1 and Type 3 Compliant

Short-Circuit and Overload Protection
Yes

Short-Circuit Proof
Yes

Input Current Limitation
Yes

Cable Length (Max.)
30 m

DIGITAL OUTPUTS

(SIO Mode Using IO-Link Ports)

Connector Type
Female, M12 A-coded, 5-pin

Number of Ports
8

Actuator (Sensor) Current Load (Max.)
200mA

IO-LINK MASTER FEATURES

Data Storage
Automatic or Manual - Upload and/or Download

Device Validation
Yes

Data Validation
Yes

Powerful Web Interface
Provides the following capabilities

- Firmware upgradable
- Password protected with Admin, Operator, and User accounts
- ISDU batch handling
- Load IODD files to configure the IO-Link Device
- IODD Handler parses xml files making them readable and configurable
- Log files

Upgradable Firmware
Yes (Web page or using PortVision DX)

Remote Parameterization
Yes

Mobile App Support
Simplify monitoring of control system Process and Service Data using simple standard clients available for free in Google Play and Apple App Store

ELECTRICAL SPECIFICATIONS

Input Voltage Rang
20-30VDC / 10A (Max)

Power Supply In
V_S - 10A (Max)
V_A - 10A (Max)

IO-Link Connector
Port 1 C/Q or Pin 4 Vx on Pins 1,3
200mA (Max) 1.6A (Max)
Ports 2-8 200mA (Max) 500mA (Max)

IO-Link Master Power
100mA @ 24VDC (Vs)

Power Supply Out
V_S - 10A (Max)*
V_A - 10A (Max)**

Short-Circuit Protection for IO-Link Connectors
Yes

Power Connectors
Input (1)
Male M12 T-coded 4-pin
Output (1)
Female M12 T-coded 4-pin

ENVIRONMENTAL SPECIFICATIONS

Air Temperature
System On
-25°C to +60°C
System Off
-40°C to +70°C

Operating Humidity (non-condensing)
10% to 95%

Storage Humidity (non-condensing)
10% to 95%

Shock/Vibrations
EN60068-2-6
EN60068-2-27

Enclosure Rating
IP67 (IEC 60529)

*Vs output available is determined by subtracting the following from the available input current:
IO-Link Module Power
Actual C/Q current for each IO-Link Port
Actual Vs current for each IO-Link port
** V_A output available is the same as the available V_A input current

WHAT IS IO-LINK?

IO-Link is a point-to-point serial communication protocol used to communicate with sensors and/or actuators. This increasingly deployed protocol extends the globally recognized PLC standard IEC 61131, which allows three types of data to be exchanged: process data, service data and events.

Major sensor manufacturers and industrial manufacturing companies, including Comtrol, have joined the international IO-Link Consortium to promote the IO-Link communication protocol due to its many advantages over standard I/O.

WHY IO-LINK?

IO-Link is a powerful, yet simple, protocol with wide support in the industry. There are many reasons to use IO-Link. In almost any place that a digital or analog sensor is used, an IO-Link sensor can provide the end user significantly more information, configurability and control. From installation to operation and even maintenance of an automation system, IO-Link provides clear advantages over legacy solutions.



Warranty Information

Comtrol offers a 30-day satisfaction guarantee and 5-year limited warranty.

Sales Support

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sales@comtrol.com

Technical Support

+1.763.957.6000
www.comtrol.com/support

Email, FTP, and Web Support

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