



## IO-Link Master 8-PNIO

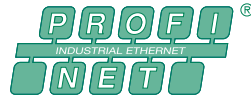
Part Number: 99605-7



### 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)
- 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

IO-LINK MASTER



### 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)  
Ingress Protection Rating  
IP67  
Installation and Grounding Method  
Machine or panel mount - two-hole M4 or #8 screws  
Network Protocols  
PROFINET IO  
Connectors (M12)  
8 - IO-Link  
2 - Ethernet  
2 - Power  
LED Indicators  
Power, Module Status, Network Status, IO-Link, DI and Ethernet Port Status  
Dimensions  
8.35" x 2.56" x 1.18"  
212 x 65 x 30 mm  
Product Weight  
1.0 lb  
454 g

## IO-LINK INTERFACE SPECIFICATIONS

Connector Type  
Female, M12 A-coded, 5-pin  
Number of Ports  
8  
IO-Link Version  
Support V1.0 and V1.1  
Connector Pinout  
Pin 1 = L+  
Pin 2 = DI  
Pin 3 = L-  
Pin 4 = C/Q  
Pin 5 = Not Connected  
Configurations per Port  
IO-Link = 1  
DI (SIO mode) = 1  
DO (SIO mode) = 1  
DI (dedicated) = 1  
IO-Link Mode Transfer Rates  
4.8K (COM1)  
38.4K (COM2)  
230.4K (COM3)  
Baud Rate Recognition  
Automatic  
Output Current on IO-Link Connectors (Ports 1-8)  
C/Q on Pin 4 Vs on Pins 1, 3  
200mA (Maximum) 1.6A (Maximum)  
200mA (Maximum) 500mA (Maximum)  
Short Circuit Protection  
Yes  
Cable Length (Maximum)  
20 m

## DIGITAL INPUTS C/Q (SIO Mode Using IO-Link Ports)

Sensor Current Load (Max.)  
200mA  
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  
C/Q Input Threshold  
Low: 8.0 - 11.5V  
High: 10.5 - 13.0V  
Cable Length (Max.)  
30 m

## DIGITAL OUTPUTS C/Q (SIO Mode Using IO-Link Ports)

Actuator Current Load (Max.)  
200mA  
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

Output Function  
PNP/NPN  
Cable Length (Max.)  
30 m

## DIGITAL INPUTS (ONLY) SPECIFICATIONS

Sensor Current Load (Maximum)  
200mA  
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  
DI Input Threshold  
Low: 5.2 - 6.4V  
High: 6.8 - 8.0V  
Cable Length (Max.)  
30 m

## PROFINET IO

Web Page Configuration  
PROFINET IO Device Name  
IOL\_CALL Function Block Timeout (1-20)  
Diagnostics  
Yes  
GSD Files  
Yes

## 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 upgradeable  
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  
Upgradeable 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 / 12A (Max)  
Power Supply In  
Vs - 12A (Max)  
Va - 12A (Max)  
Power Consumption (Without Load)  
100mA @ 24VDC (Vs)  
Power Supply Out  
Vs - 10A (Max)\*  
Va - 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

\*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  
\*\* Va output available is the same as the available Va input current

## 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)

## EXPORT INFORMATION

Package Shipping Weight  
1.2 lb  
544.3 g  
Package Dimensions  
10.5" x 4.5" x 1.5"  
267 x 114 x 38mm  
UPC Code  
7-56727-99605-7  
Country of Origin  
USA  
ECCN  
5A992  
Schedule B Number  
8517.62.0050

## REGULATORY APPROVALS

Immunity  
European Standard EN 61000-6-2  
International Standard IEC 61000-6-2  
IEC/EN 61131-2  
IEC 1000-4-2/EN 61000-4-2: Electrostatic Discharge (ESD)  
IEC 1000-4-3/EN 61000-4-3: Radiated, Radio-Frequency (RF)  
IEC 1000-4-4/EN 61000-4-4: Fast Transient/Burst  
IEC 1000-4-5/EN 61000-4-5: Surge  
IEC 1000-4-6/EN 61000-4-6: Conducted disturbance  
IEC 1000-4-8/EN 61000-4-8: Magnetic field  
IEC 1000-4-11/EN 61000-4-11: Dips and Voltage Variations  
Emissions  
European Standard EN 61000-6-4  
International Standard IEC 61000-6-4  
AS/NZS CISPR-11  
FCC Part 15 Subpart B  
Class A limit  
Canadian EMC requirements ICES-001  
Safety  
CSA C22.2 No. 61010-1-12 / CSA C22.2 No. 61010-1-201  
Other  
Ingress Protection rating IP67 (IEC 60529)  
Environmental & Mechanical testing per IEC/EN 61131-2  
European Standard: 2011/65/EU (RoHS2) Directive.  
Regulatory Approval Symbols



### 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

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