

IO-Link

Features

- ✓ Converts 4-20mA Analog to IO-Link
- ✓ Connects Directly to Sensor | Master
- ✓ LED Indication - Green | Amber
- ✓ Seamless Device M12 Connection



Streamlined Connectivity with LinkPro® IO-Link Adapter

IO-Link® is a point-to-point communication link between a master device and a sensor. It can be used to automatically parameterize sensors and to transmit process data.

LinkPro® IO-Link Adapter connects to a current source (4-20mA) and outputs the value to the IO-Link Master. By connecting directly to the sensor, it provides a direct link between the sensor and the IO-Link network, facilitating reliable and high-speed data transmission.

Specifications

Supply Voltage	18 - 30 VDC @ 50mA Max.
Analog Current	4-20mA Input - 2 Wire 3 Wire
Analog Current Input	Digital IO-Link Output
Accuracy	±0.5%
Analog Input Impedance	Approx. 50Ω
Leakage Current Immunity	400 µA
Power Pass-Through Current	1 A Maximum
Supply Protection Circuitry	Protected against Reverse Polarity and Transient Voltages
Resolution	14-bits
LED Status Indicators	Green Amber
Connections	Integral Male/Female 4-pin M12
Operating Temperature	-40°F - 158°F
Storage Temperature	-40°F - 176°F
Construction	Coupling Material : Nickel Plated Brass Connector Body : PVC Translucent Black
Environmental Rating	IP65, IP67, IP68, NEMA/UL Type 1

IO-Link System

PLC | Control & Monitoring

PLC executes programmed instructions to precisely control machinery and processes based on data received from the IO-Link Master, enabling agile and responsive operations in manufacturing. It coordinates operations based on sensor inputs, making adjustments to optimize production and enhance operational efficiency.



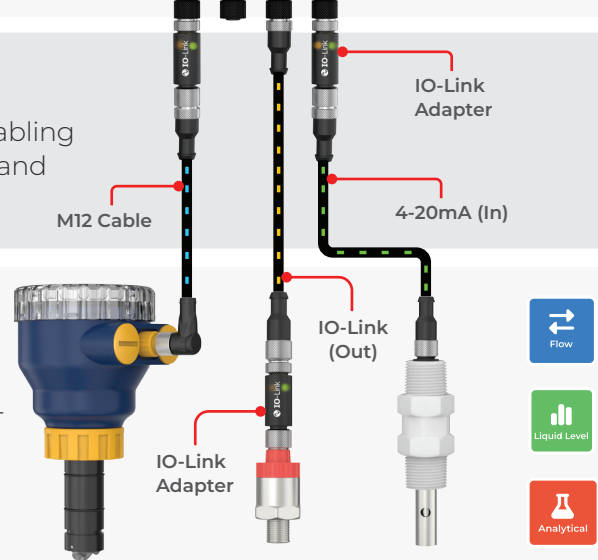
IO-Link Master | Network & Control

Centralized hub for managing IO Link-enabled devices, facilitating bidirectional communication between Sensors and the PLC for seamless integration into industrial automation systems.



IO-Link Converter | Analog Signal Processing

Translates signals from Sensors & Actuators into digital data, enabling communication with the IO-Link Master for centralized control and monitoring to higher-level control systems.



Field Devices | Sensors

Physical devices responsible for detecting and manipulating real-world parameters, interfacing directly with the IO-Link Converter for data transmission. Essential components in industrial processes, including flow, level and 4-20mA analytical sensors, can be linked with IO-Link.

Status Indicators

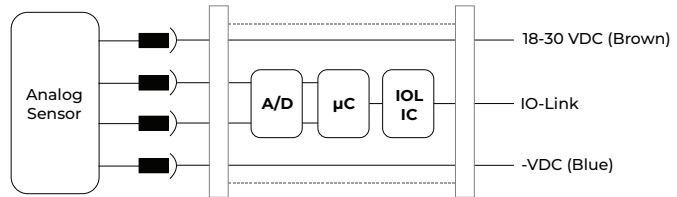
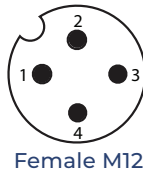
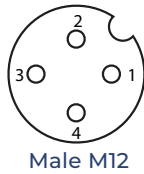
Indicator	Status
Power LED Indicator (Green)	Solid Green - Power On OFF - Power Off
IO-Link Communication LED Indicator (Amber)	Flashing Amber (900 ms ON, 100 ms OFF) - IO-Link Communications are active. OFF - IO-Link Communications are not present
Analog Communication LED Indicator (Amber)	Solid Amber - 4-20mA Analog current value is between setpoint SP1 & setpoint SP2 OFF - Analog current value is less than setpoint SP1 or Analog value is greater than setpoint SP2 Default Values : SP1 = 4mA SP2 = 20mA



Communication Parameters

Parameter	Value	Parameter	Value
IO-Link Version	V1.1	Port Class	A
Process Data In Length	32 bits	SIO Mode	Yes
Process Data Out Length	N/A	Smart Sensor Profile	Yes
Bit Rate	38400 bps	Block Parameterization	Yes
Minimum Cycle Time	3.6ms	Data Storage	Yes

Wiring Diagram



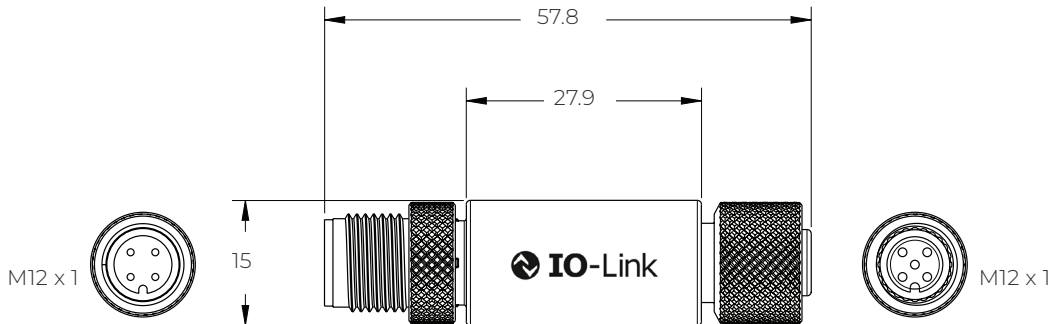
Male M12 (IO-Link Master)	
Pin	Description
1	18-30 VDC
2	Factory-Specific
3	-VDC
4	IO-Link

Female M12 (Sensor) - 3 Wire		
Pin	Color	Description
1	Brown	18-30 VDC
2	White	4-20mA+
3	Blue	-VDC 4-20mA-
4	Black	-

Female M12 (Sensor) - 2 Wire		
Pin	Color	Description
1	Brown	4-20mA+
2	White	4-20mA -
3	Blue	-
4	Black	-

* A shielded cable is required on the female (sensor) side.

Dimensions (mm)



Model Selection

IOAD - IO - A - D : IO-Link Adapter



IO-Link

Scan QR Code for IODD File

For Latest IODD Files, please refer to iconprocon.com

