



IO-Link

The foundation of Industry 4.0



ifm offers a variety of IO-Link I/O master blocks and IO-Link compatible sensors.

Today's sensors have evolved from standard switches with simple on/off capabilities to highly intelligent devices with built-in microprocessors that process large amounts of data. This data has been trapped with no pathway to the control system ... until now.

Introducing IO-Link

IO-Link is a communication interface that unlocks trapped data in the existing sensor's electronics and transmits the data via a pure digital signal to the controller. By simply replacing the Ethernet I/O block with a version that has IO-Link capabilities and using IO-Link enabled sensors, the intelligence in industrial sensors is unlocked. IO-Link provides:

- Simple plug-and-play replacement of sensors; easy real-time recipe changes, and diagnostic feedback on the sensor's operation
- Continuous monitoring of machine vibration in real-time allowing equipment to be serviced as needed instead of at scheduled intervals
- A better understanding of the cost of production by monitoring energy usage
- Mass production of quality parts by determining exact tolerances
- Improved product efficiency by tracing valuable assets throughout the manufacturing process

The foundation of Industry 4.0 is utilizing real-time data from the plant floor. By having full access to sensor data and transmitting the data to the controller via IO-Link, plant operators can analyze the data to make adjustments to machines with greater accuracy, eliminate downtime and maximize overall equipment effectiveness.












IO-Link is a worldwide open-standard protocol for connecting sensors and devices and does not require any special wiring.

To get started...

Use an IO-Link master with existing wiring and IO-Link enabled sensors. LineRecorder device software offers easy and fast parameter setting, and more.



IO-Link sensors in this catalog are noted with the symbol 

Company	IO-Link	Position Sensors						Motion Control	Vision Sensors
		Inductive	Capacitive	Cylinder / valve position	Photoelectrics / lasers / fiber optics	Distance / Application specific	Ultrasonic	Encoders / Speed monitors	2D / 3D inspection
									
1 - 5	6 - 21	22 - 55	56 - 61	62 - 71	72 - 111	112 - 117	118 - 119	120 - 127	128 - 143

IO-Link Benefits

► Analog vs. IO-Link digital

Conventional: Analog signals require multiple analog-to-digital conversions that affect the accuracy of the sensor's output signal.



IO-Link: Requires only one analog-to-digital conversion. This avoids conversion losses of up to 1% accuracy.



► Sensor parameterization

Conventional: Change parameters via on-board pushbuttons.



IO-Link: Sensors can be parameterized remotely by PLC.

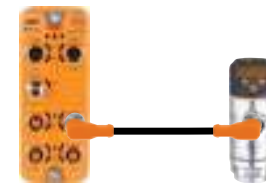


► Automatic device replacement

Conventional: If a sensor needs to be replaced, the sensor must be re-programmed with pushbuttons.

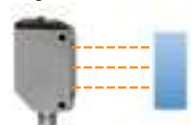


IO-Link: Data is automatically uploaded to a sensor. No need for manual parameterization.



► Diagnostic information for predictive maintenance

Conventional: It is not possible to obtain diagnostic information without changing or adding wiring in the PLC.



Ex. Clean lens 100% excess gain

IO-Link: Transfers diagnostic information on existing wiring allowing for predictive maintenance.



Ex. Dirty lens 40% excess gain



Pure digital signal: IO-Link transmits a pure digital signal value that is noise-immune and more reliable than conventional analog signals.



Remote parameterization: Access to all available parameters of the sensors can be reached through the PLC without the need for external software and local sensor display.



Simple plug-and-play sensor replacement: IO-Link restores the sensor or actuator parameters automatically when replacing and servicing the sensors.



Recipe changes: Recipe changes can be made to multiple sensors from your controller. Downtime and production changeover is minimized.



Sensor health: On existing wiring, additional diagnostic information can be transferred for easier fault location and predictive indication.



Not a fieldbus dependent system: IO-Link can be added to most existing control architectures with minimal cost.

Safety Technology

Process Sensors

Industrial Networks

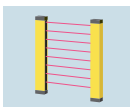
ID Systems

Machine Condition

Power Supplies

Wiring Technology

Safety products



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Pressure



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Flow



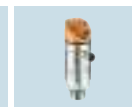
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Level



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Temperature



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AS-i network



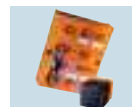
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Safety systems



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RF identification systems



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Diagnostic systems



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Cordset solutions

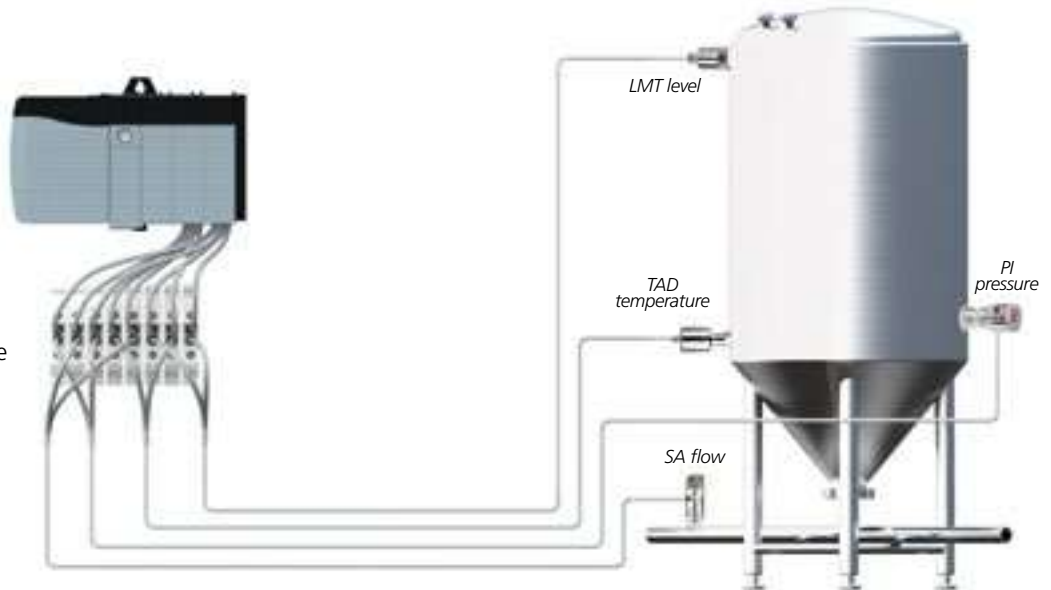


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Typical controls architecture

In a standard ethernet architecture, sensors can only transmit simple on / off or analog signals to the plc.

Process instruments use multiple analog cards which increase costs and limit the number of I/O.



IO-Link controls architecture

IO-Link is a communication interface that unlocks trapped data in sensors and transmits the data via a pure digital signal to the plc.

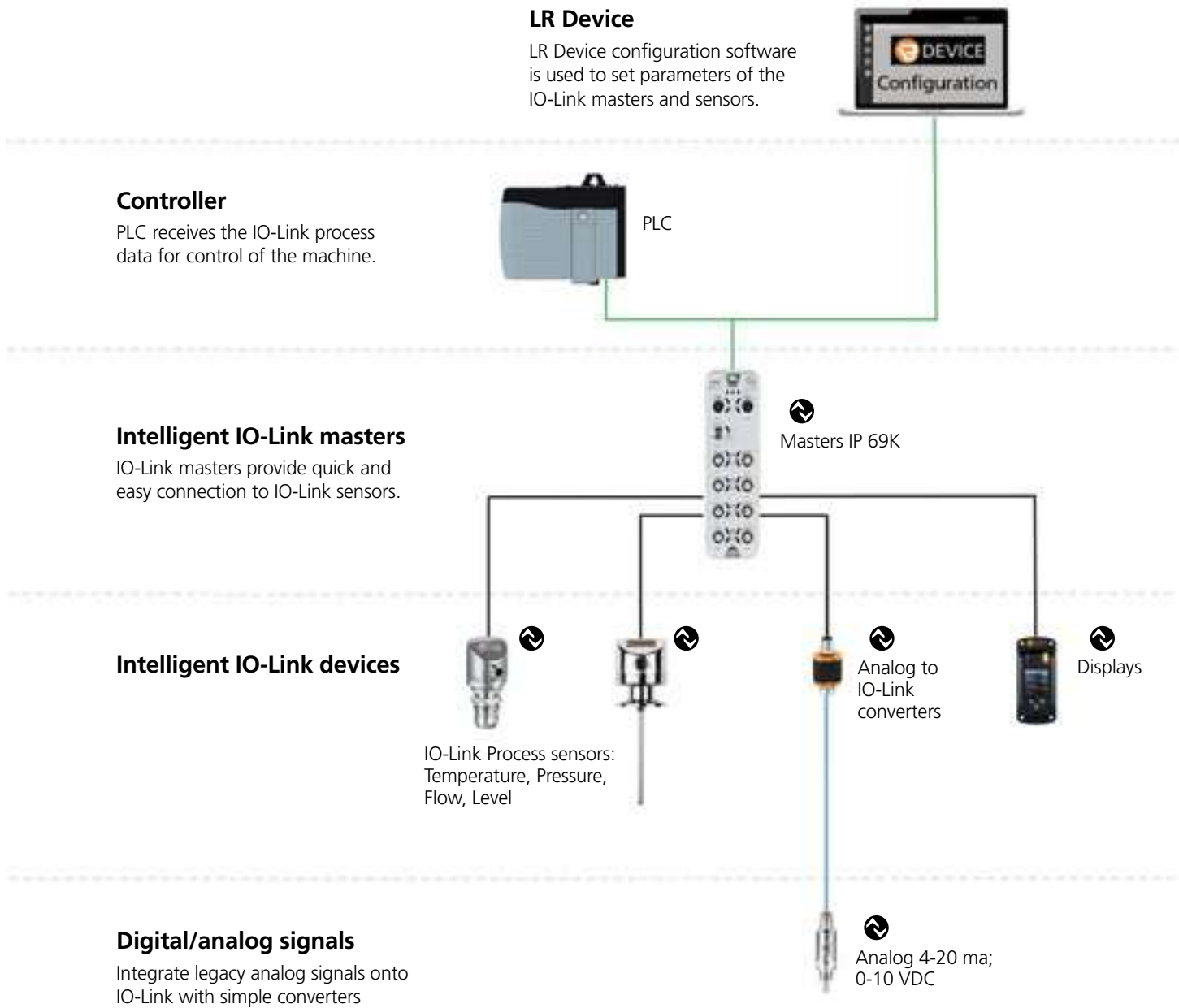
An IO-Link Master located in the field near the sensors, uses existing fieldbus protocol, such as Ethernet IP.



Existing standard cables are used with IO-Link.

	IO-Link	Position Sensors						Motion Control	Vision Sensors
Company	IO-Link	Inductive	Capacitive	Cylinder / valve position	Photoelectrics / lasers / fiber optics	Distance / Application specific	Ultrasonic	Encoders / Speed monitors	2D / 3D inspection
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IO-Link system overview for process



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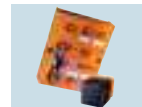
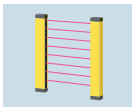
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RF identification systems

Diagnostic systems

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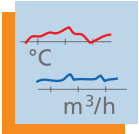
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IO-Link – process industry applications

Cooling water monitoring in the foundry



The cooling system in a typical furnace is critical to its proper machine operation and to the process of producing quality parts. Accurate cooling of the elements improve the life cycle and safety of the machine. In order to do this, several flow parameters of the cooling water, such as temperature and flow need to be accurately monitored. This requires multiple sensors and installation points throughout the machine.

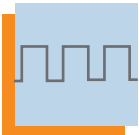


Additional functions with IO-Link data

ifm's SM magmeter flow sensor via IO-Link transmits flow rate, temperature and a totalizer value using a standard 3-wire cable.

IO-Link eliminates multiple costly analog cards, extra pipe fittings, numerous termination points and excessive stock inventory.

Media detection in process tanks



The ifm LMT level sensor is used as a switch to determine the low and high level or pump run dry condition in tank applications. Typically, the feedback will be "on" when the media is present and "off" when there is no media.



Additional functions with IO-Link data

With IO-Link, additional information is accessible from the LMT sensor. The real digital process value is available to determine the type of the media, such as water or milk, etc. The IO-Link value can be used to differentiate between medium and build-up on the sensing face.

Identification of the media is critical, especially in the washing process. Once the media is flushed out of the tank, the cleaning process can be started to maximize production time.

	IO-Link	Position Sensors					Motion Control	Vision Sensors	
Company	IO-Link	Inductive	Capacitive	Cylinder / valve position	Photoelectrics / lasers / fiber optics	Distance / Application specific	Ultrasonic	Encoders / Speed monitors	2D / 3D inspection
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Continuous tank level measurement



The PI pressure sensor provides a 4...20 mA and switching output. Traditional analog signals can be prone to EMC disturbances and need to be scaled to show the real pressure of the system at the plc. High and low pressure spikes are stored in the sensor, which may be an indication of a challenge, but this information has no direct access to the control system.



Additional functions with IO-Link

With IO-Link, real pressure values can be accessed without the need to scale the signal. For example, a pressure sensor rated from 0 to 100 inH₂O, the same value range is accurately transmitted to the control system without the need for scaling.

By retrieving high and low pressure values from the sensor, any unexpected pressure spikes and dips can be monitored directly. This is important because it can lead to sensor failure or contaminated products.

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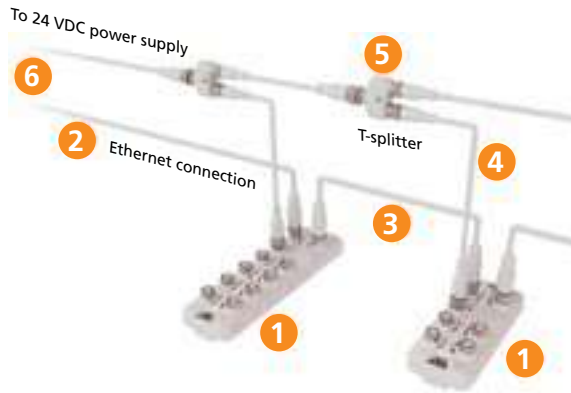
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Power supply distribution with T-splitters


- Masters with 4 or 8 configurable ports, IO-Link, digital inputs or digital outputs (< 200mA)
- Standard M12 T-coded power cables reduces cost of power connection (up to 4A)
- IO-Link 1.1 compatible with COM1, COM2, COM3
- 2 Ethernet ports 10/100 Base-TX with integrated switch
- IO-Link Masters and sensors are configurable via LR Device software

Type	Description	Interface	Part No.	List Price (1-pc.)
1 IO-Link Master block				
	4-port IO-Link IP69K module	Profinet	AL1101	\$327.00
	8-port IO-Link IP69K module	Profinet	AL1103	\$385.00
	4-port IO-Link IP69K module	Ethernet/IP	AL1121	\$327.00
	8-port IO-Link IP69K module	Ethernet/IP	AL1123	\$385.00



2 M12 male Ethernet cable, IP69K

Type	Description	Part No.	List Price (1-pc.)
	straight, 2 m MPPE	EVF518	\$22.00
	straight, 5 m MPPE	EVF519	\$38.00
	straight, 10 m MPPE	EVF520	\$64.00
	straight, 20 m MPPE	EVF521	\$116.00
	straight, 50 m MPPE	EVF522	\$272.00



3 M12 to M12 Ethernet Patchcord, IP69K

	straight/straight, 0.25 m MPPE	EVF528	\$25.00
	straight/straight, 0.5 m MPPE	EVF529	\$26.00
	straight/straight, 1 m MPPE	EVF530	\$28.00
	straight/straight, 2 m MPPE	EVF531	\$34.00
	straight/straight, 5 m MPPE	EVF532	\$49.00


6 M12 Power Cables

	Straight, 5 m PUR	EVF483	\$43.00
	Straight, 10 m PUR	EVF484	\$88.00
	Right angle, 2 m PUR	EVF488	\$43.00
	Right angle, 5 m PUR	EVF489	\$88.00

4 M12 Power Patchcord (17 AWG), IP69K

Type	Description	Part No.	List Price (1-pc.)
	straight/straight, 0.5 m MPPE	EVF491	\$42.00
	straight/straight, 1 m MPPE	EVF492	\$45.00
	straight/straight, 2 m MPPE	EVF493	\$46.00
	straight/straight, 5 m MPPE	EVF494	\$50.00
	straight/straight, 10 m MPPE	EVF495	\$57.00
	straight/straight, 20 m MPPE	EVF496	\$67.00
	straight/right angle, 0.5 m MPPE	EVF505	\$42.00
	straight/right angle, 1 m MPPE	EVF506	\$45.00
	straight/right angle, 2 m MPPE	EVF507	\$46.00
	straight/right angle, 5 m MPPE	EVF508	\$52.00
	straight/right angle, 10 m MPPE	EVF509	\$57.00
	straight/right angle, 20 m MPPE	EVF510	\$67.00


5 T-splitter

	T-splitter M12	EBF009	\$27.00
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IO-Link

Company




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Position Sensors

Inductive




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Capacitive




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Cylinder / valve position




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Photoelectrics / lasers / fiber optics




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Distance / Application specific



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Ultrasonic



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Motion Control


Encoders / Speed monitors



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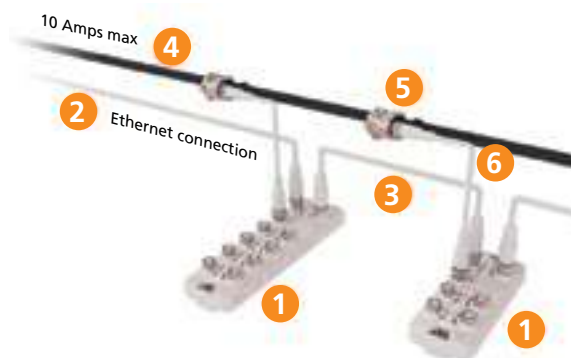
Vision Sensors

2D / 3D inspection



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Power supply distribution using flat cables




- Masters with 4 or 8 configurable ports, IO-Link, digital inputs or digital outputs (< 200mA)
- Standard M12 power connection reduces cost of power connection (up to 4A)
- IO-Link 1.1 compatible with COM1, COM2, COM3
- 2 Ethernet ports 10/100 Base-TX with integrated switch
- IO-Link Masters and sensors are configurable via LR Device software

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1 IO-Link Master block				
	4-port IO-Link IP69K module	Profinet	AL1101	\$327.00
	8-port IO-Link IP69K module	Profinet	AL1103	\$385.00
	4-port IO-Link IP69K module	Ethernet/IP	AL1121	\$327.00
	8-port IO-Link IP69K module	Ethernet/IP	AL1123	\$385.00



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	straight, 5 m MPPE	EVF519	\$38.00
	straight, 10 m MPPE	EVF520	\$64.00
	straight, 20 m MPPE	EVF521	\$116.00
	straight, 50 m MPPE	EVF522	\$272.00

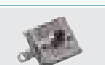

3 M12 to M12 Ethernet Patchcord, IP69K

	straight/straight, 0.25 m MPPE	EVF528	\$25.00
	straight/straight, 0.5 m MPPE	EVF529	\$26.00
	straight/straight, 1 m MPPE	EVF530	\$28.00
	straight/straight, 2 m MPPE	EVF531	\$34.00
	straight/straight, 5 m MPPE	EVF532	\$49.00



4 Flat cable

	AS-i flat cable, grey PVC, 100 m	U71002	\$373.00
	AS-i flat cable, black TPE-PVC compound, 100 m	E74310	\$603.00

5 Flat cable to M12 taps

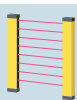
Type	Description	Part No.	List Price (1-pc.)
	Flat cable splitter, IP69K, stainless steel	E70354	\$43.00
	FC insulation displacement connector	E70454	\$31.00

6 M12 Power Patchcord (17 AWG), IP69K

Type	Description	Part No.	List Price (1-pc.)
	straight/straight, 1 m MPPE	EVF492	\$45.00
	straight/straight, 2 m MPPE	EVF493	\$42.00
	straight/straight, 5 m MPPE	EVF494	\$50.00
	straight/straight, 10 m MPPE	EVF495	\$57.00
	straight/straight, 20 m MPPE	EVF496	\$67.00
	straight/right angle, 1 m MPPE	EVF506	\$45.00
	straight/right angle, 2 m MPPE	EVF507	\$46.00
	straight/right angle, 5 m MPPE	EVF508	\$52.00
	straight/right angle, 10 m MPPE	EVF509	\$57.00
	straight/right angle, 20 m MPPE	EVF510	\$67.00

Safety Technology

Safety products



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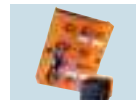
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ID Systems

RF identification systems



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Power supplies



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Cordset solutions

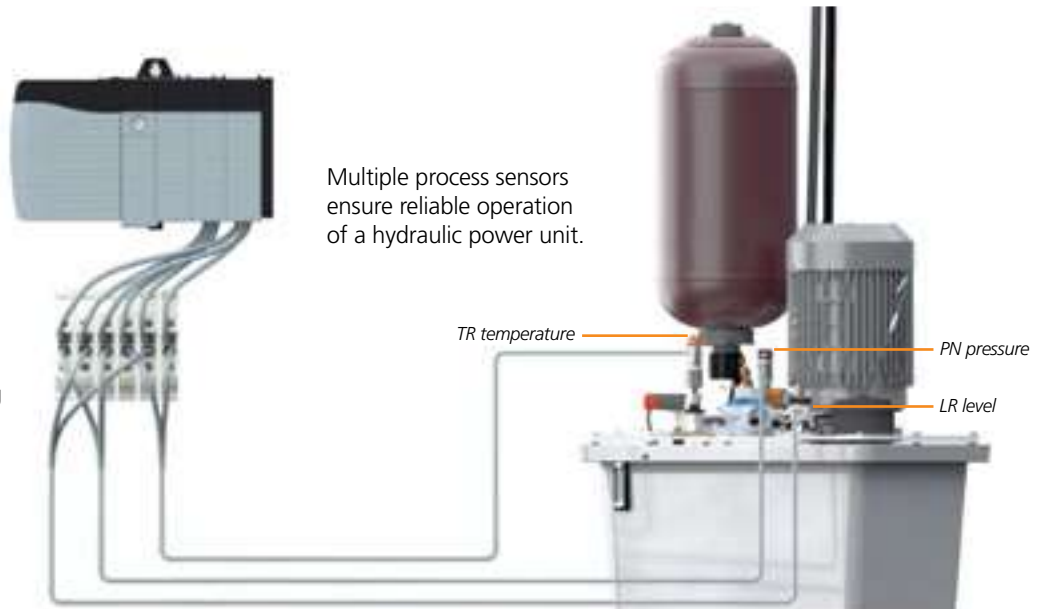


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Typical controls architecture

In a standard ethernet architecture, sensors transmit simple on / off or analog signals to the plc.

- Multiple analog cards are required and can be expensive
- Result in complex wiring
- Number of I/O is limited due to PLC space limitation

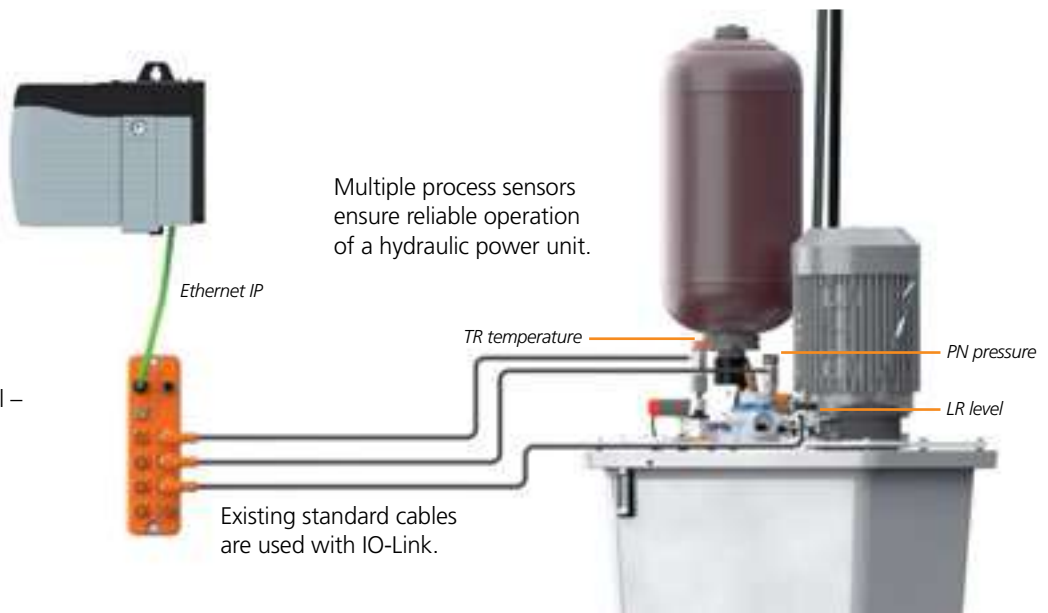


IO-Link controls architecture



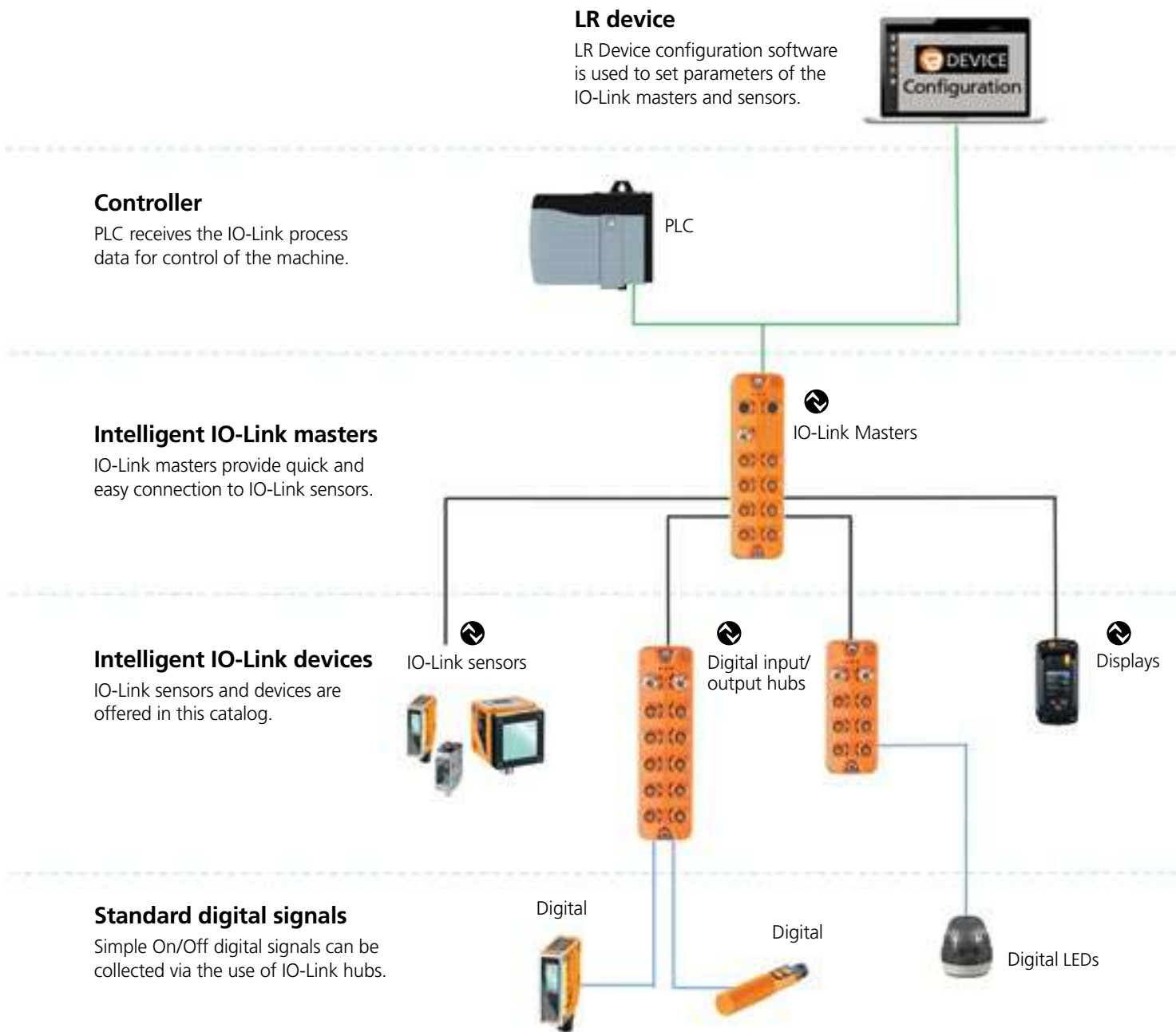
IO-Link unlocks trapped data in sensors and transmits the data via a pure digital signal to the plc.

- No input cards
- No complex wiring
- Sensor values are actual – no scaling is necessary



Company	IO-Link	Position Sensors		Cylinder / valve position	Photoelectrics / lasers / fiber optics	Distance / Application specific	Ultrasonic	Motion Control	Vision Sensors
	IO-Link	Inductive	Capacitive					Encoders / Speed monitors	2D / 3D inspection
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IO-Link system overview for industrial automation



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AS-i network

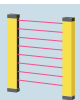
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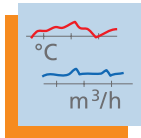
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IO-Link – automation industry applications

Compressed gas meter for recording energy consumption



Leaks are a significant source of wasted energy in compressed air systems, can contribute to problems with system operations and cause system pressures to fluctuate. This, in turn, can lead the air-operated equipment to function less efficiently and possibly affect production. Unnecessary cycling may occur and increase the run time. Maintaining the equipment becomes more critical. ifm's SD air flow sensor allows for the detection and elimination of expensive line leakages.



Additional functions with IO-Link data

Implementing compressed air monitoring systems are typically cost prohibitive, but with IO-Link this doesn't have to be the situation. Using the SD air flow sensor, IO-Link transmits multiple process values over a single cable, such as flow rate, temperature and totalizer values eliminating numerous and costly analog cards. Since this one sensor can transmit multiple process signals, extra pipe fittings, sensors and wires are eliminated and ultimately streamlines inventory. The savings from detecting wasted energy and reduction in total installation costs allow for a quick return on investment.

Vacuum sensors monitor suction grippers



PN7 Series vacuum sensors detect the required vacuum for proper operation of suction grippers. If the minimum values are not reached, the suction gripper remains in its initial position so as to prevent damage to the workpieces and systems. The high-pressure compressed air network (175 psi) and the low-pressure compressed air network (87 psi) is monitored.

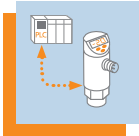


Additional functions with IO-Link data

Sometimes a sensor must be replaced and then reconfigured. If the PN7 vacuum sensor needs to be replaced, IO-Link's automatic device replacement feature can copy the parameters to the new sensor. This saves time and prevents possible errors in setting the switch points. The vacuum sensor can also be used as an on/off switch or analog functionality via IO-Link, allowing one sensor to handle both digital and analog applications. IO-Link reduces cost and inventory stocking requirements.

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Collision check on the assembly platform



Optical distance sensor Series O1D detects if the assembly platform is free of the car body. Before the car body is conveyed within the area, the hanger will be lowered and only then will the car assembly be securely positioned. The mounting position of the O1D is critical and often cannot be parameterized without stopping the assembly line if the application must change.



Additional functions with IO-Link data

Remote parameterization is key in this application. ifm's O1D distance sensor is mounted in an inaccessible location and cannot be adjusted without stopping the production line.

As different production models are changed within the application, IO-Link enables the sensor's parameters to be changed remotely via the controller. No need to stop the line!

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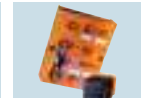
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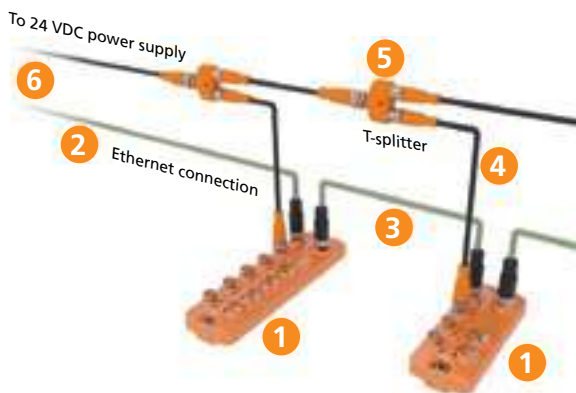
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Cordset solutions




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Standard Line – power supply distribution with T-splitters




- Standard Line masters with 4 or 8 configurable ports, IO-Link, digital inputs or digital outputs (< 200mA)
- Standard M12 T-coded power cables reduces cost of power connection (up to 4A)
- IO-Link 1.1 compatible with COM1, COM2, COM3
- 2 Ethernet ports 10/100 Base-TX with integrated switch
- IO-Link Masters and sensors are configurable via LR Device software

Type	Description	Interface	Part No.	List Price (1-pc.)
1 IO-Link Master block				
	4-port IO-Link master, IP67	Profinet	AL1100	\$249.00
	8-port IO-Link master, IP67	Profinet	AL1102	\$334.00
	4-port IO-Link master, IP67	Ethernet/IP	AL1120	\$286.00
	8-port IO-Link master, IP67	Ethernet/IP	AL1122	\$334.00



2 M12 to RJ45 Ethernet Patchcords

Type	Description	Part No.	List Price (1-pc.)
	Cross-over patchcord, 2 m PVC	E11898	\$45.00
	Cross-over patchcord, 5 m PUR	E18422	\$54.00
	Cross-over patchcord, 10 m PUR/PC	E18423	\$69.00



3 M12 to M12 Ethernet Patchcords

	Ethernet cable, 0.5 m PVC	E12422	\$57.00
	Ethernet cable, 2 m PVC	E21138	\$88.00
	Ethernet cable, 5 m PVC	E21139	\$95.00
	Ethernet cable, 10 m PVC	E21137	\$117.00
	Ethernet cable, 20 m PVC	E12423	\$137.00


6 M12 Power Cables

	Straight, 5 m PUR	EVC707	\$22.00
	Straight, 10 m PUR	EVC708	\$27.00
	Right angle, 5 m PUR	EVC712	\$22.00
	Right angle, 10 m PUR	EVC713	\$27.00





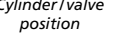





4 M12 Power Patch cables

Type	Description	Part No.	List Price (1-pc.)
	straight/straight, 0.5 m PUR	EVC717	\$23.00
	straight/straight, 1 m PUR	EVC718	\$24.00
	straight/straight, 2 m PUR	EVC719	\$26.00
	straight/straight, 5 m PUR	EVC720	\$32.00
	straight/straight, 10 m PUR	EVC721	\$40.00
	straight/straight, 20 m PUR	EVC722	\$51.00
	straight/right angle, 0.5 m PUR	EVC731	\$23.00
	straight/right angle, 1 m PUR	EVC732	\$24.00
	straight/right angle, 2 m PUR	EVC733	\$26.00
	straight/right angle, 5 m PUR	EVC734	\$32.00
	straight/right angle, 10 m PUR	EVC735	\$40.00
	straight/right angle, 20 m PUR	EVC736	\$51.00

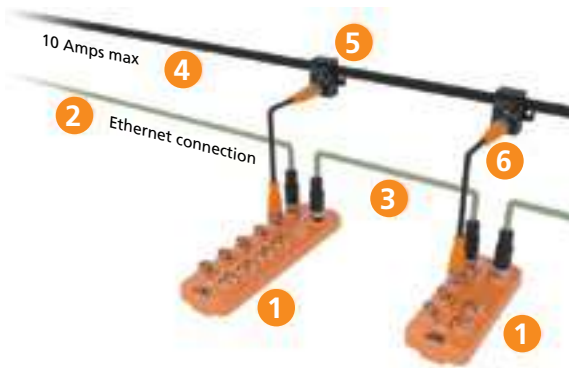
5 T-splitter

	T-splitter M12	EBC116	\$25.00
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Search Bar

Company	IO-Link	Position Sensors	Inductive	Capacitive	Cylinder / valve position	Photoelectrics / lasers / fiber optics	Distance / Application specific	Ultrasonic	Motion Control Encoders / Speed monitors	Vision Sensors 2D / 3D inspection
										
1 - 5	6 - 21	22 - 55	56 - 61	62 - 71	72 - 111	112 - 117	118 - 119	120 - 127	128 - 143	



Standard Line – power supply distribution with flat cables





- Standard Line masters with 4 or 8 configurable ports, IO-Link, digital inputs or digital outputs (< 200mA)
- Standard M12 power connection reduces cost of power connection (up to 4A)
- IO-Link 1.1 compatible with COM1, COM2, COM3
- 2 Ethernet ports 10/100 Base-TX with integrated switch
- IO-Link Masters and sensors are configurable via LR Device software

Type	Description	Interface	Part No.	List Price (1-pc.)
1 IO-Link Master block				
	4-port IO-Link master, IP67	Profinet	AL1100	\$249.00
	8-port IO-Link master, IP67	Profinet	AL1102	\$334.00
	4-port IO-Link master, IP67	Ethernet/IP	AL1120	\$286.00
	8-port IO-Link master, IP67	Ethernet/IP	AL1122	\$334.00


2 M12 to RJ45 Ethernet Patchcords

Type	Description	Part No.	List Price (1-pc.)
	Cross-over patchcord, 2 m PVC	E11898	\$45.00
	Cross-over patchcord, 5 m PUR	E18422	\$54.00
	Cross-over patchcord, 10 m PUR/PC	E18423	\$69.00



5 Flat cable to M12 taps

Type	Description	Part No.	List Price (1-pc.)
	FC insulation displacement connector	E70483	\$19.00
	FC insulation displacement connector	E70485	\$12.00


3 M12 to M12 Ethernet Patchcords

	Ethernet cable, 0.5 m PVC	E12422	\$57.00
	Ethernet cable, 2 m PVC	E21138	\$88.00
	Ethernet cable, 5 m PVC	E21139	\$95.00
	Ethernet cable, 10 m PVC	E21137	\$117.00
	Ethernet cable, 20 m PVC	E12423	\$137.00

6 M12 Power Patch cables

Type	Description	Part No.	List Price (1-pc.)
	straight/straight, 1 m PUR	EVC718	\$24.00
	straight/straight, 2 m PUR	EVC719	\$26.00
	straight/straight, 5 m PUR	EVC720	\$32.00
	straight/straight, 10 m PUR	EVC721	\$40.00
	straight/straight, 20 m PUR	EVC722	\$51.00
	straight/right angle, 1 m PUR	EVC732	\$24.00
	straight/right angle, 2 m PUR	EVC733	\$26.00
	straight/right angle, 5 m PUR	EVC734	\$32.00
	straight/right angle, 10 m PUR	EVC735	\$40.00
	straight/right angle, 20 m PUR	EVC736	\$51.00

4 Flat cable

	Reverse polarity protected, black EPDM, 100 m	E74015	\$229.00
	Reverse polarity protected, black TPE, 100 m	E74215	\$438.00

Safety Technology

Process Sensors

Industrial Networks

ID Systems

Machine Condition

Power Supplies

Wiring Technology

Safety products

Pressure

Flow

Level

Temperature

AS-i network

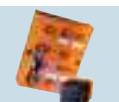
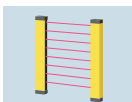
Safety systems

RF identification systems

Diagnostic systems

Power supplies

Cordset solutions



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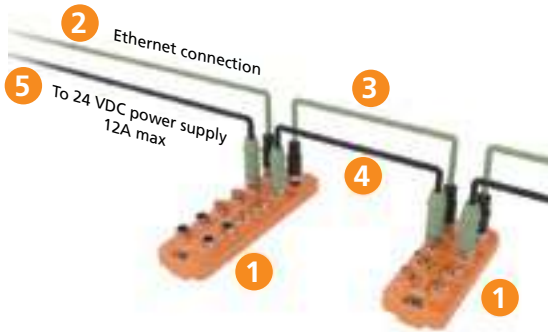
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Power Line – Power supply distribution with daisy-chain power supply




- Power Line masters with 4 or 8 configurable ports, IO-Link, digital inputs or digital outputs (< 200mA)
- Integrated fieldbus switch for daisy chaining modules
- Innovative M12 T-coded cables can be daisy-chained between modules; rated up to 12A.
- IO-Link 1.1 compatible with COM1, COM2, COM3
- 2 Ethernet ports 10/100 Base-TX with integrated switch
- IO-Link Master and sensors are configurable via LR Device software

Type	Description	Interface	Part No.	List Price (1-pc.)
1 IO-Link Master block				
	4-port IO-Link master	Profinet	AL1200	\$321.00
	8-port IO-Link master	Profinet	AL1202	\$375.00
	4-port IO-Link master	Ethernet/IP	AL1220	\$321.00
	8-port IO-Link master	Ethernet/IP	AL1222	\$375.00


2 M12 to RJ45 Ethernet Patchcords

Type	Description	Part No.	List Price (1-pc.)
	Cross-over patchcord, 2 m PVC	E11898	\$45.00
	Cross-over patchcord, 5 m PUR	E18422	\$54.00
	Cross-over patchcord, 10 m PUR/PC	E18423	\$69.00


3 M12 to M12 Ethernet Patchcords

	Ethernet cable, 0.5 m PVC	E12422	\$57.00
	Ethernet cable, 2 m PVC	E21138	\$88.00
	Ethernet cable, 5 m PVC	E21139	\$95.00
	Ethernet cable, 10 m PVC	E21137	\$117.00
	Ethernet cable, 20 m PVC	E12423	\$137.00

4 M12 T-Coded Power Patchcords

Type	Description	Part No.	List Price (1-pc.)
	60 V AC, PUR, 0.5 m	E12425	\$58.00
	60 V AC, PUR, 2 m	E12426	\$67.00
	60 V AC, PUR, 5 m	E12427	\$85.00
	60 V AC, PUR, 10 m	E12428	\$115.00
	60 V AC, PUR, 20 m	E12429	\$174.00

5 M12 T-Coded Power Cables

	TPU, 2 m	E12430	\$39.00
	TPU, 5 m	E18519	\$55.00









Company

IO-Link

Position Sensors

Motion Control

Vision Sensors

	Inductive	Capacitive	Cylinder / valve position	Photoelectrics / lasers / fiber optics	Distance / Application specific	Ultrasonic	Encoders / Speed monitors	2D / 3D inspection		
Search Bar										
	1 - 5	6 - 21	22 - 55	56 - 61	62 - 71	72 - 111	112 - 117	118 - 119	120 - 127	128 - 143



Accessories

- Expand the functionality of IO-Link masters with IO-Link hubs, displays and converters
- LineRecorder Device software for easy parameter configuration of IO-Link sensors and masters

Type	Description	Part No.	List Price (1-pc.)
IO-Link Hubs			
	Input hub – 4-ports; capable of 8 inputs, IP67	AL2400	\$116.00
	Input hub – 8-ports; capable of 16 inputs, IP67	AL2401	\$141.00
	Output hub – 6-ports; capable of 12 outputs, IP67	AL2330	\$180.00
	Output hub – 6-ports; capable of 12 outputs, IP69K	AL2230	\$208.00
Configuration Software			
	LineRecorder Device, software for remote parameter setting and monitoring of all connected sensors. Automatically identifies all IO-Link masters and IO-Link sensors within the ethernet network. Decreases commissioning time; Optimizes the device replacement process; Easy graphical visuals.	QA0011	\$110.00
	USB IO-Link master cable for parameter setting	E30390	\$367.00
	Memory plug to store sensor's parameters for easy upload without a computer	E30398	\$51.00
IO-Link Display			
	Module displays process values of ifm IO-Link sensors – includes full graphic TFT display – mounts in-line	E30430	\$140.00
IO-Link Converter			
	Compact device converts 4...20 mA analog signal to IO-Link communication, M12 connection	DP2200	\$118.00

i Who developed IO-Link?

IO-Link is a consortium of sensors and plc manufacturers dedicated to unlocking the trapped data in sensors. The main goal of the consortium is to enable users to extract sensor intelligence without adding cost.

Safety Technology

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AS-i network

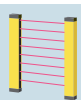
Safety systems

RF identification systems

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Power supplies

Cordset solutions



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