



IO-Link

# IO-Link device for extension of master modules by digital inputs and outputs



IO-Link modules



**Decentralised switching of digital outputs via IO-Link and binary signal collection**

**Adds up to 20 digital inputs and outputs to an IO-Link master module**

**For use in industrial applications plus new variant for hygienic areas**

**Output current up to 1.8 A a supply channel**

**Pre-processing of the input signals by digital input filters**



## Switching of decentralised inputs and outputs via IO-Link

The new IO-Link input/output modules provide an easy and cost-effective way to add powerful digital inputs and outputs to ifm's IO-Link master module for field use. Typical tasks include decentralised switching of loads and actuators or collecting and processing of digital signals.

### Applications

The modules are available in two designs: The orange field module of the coolant series is resistant to oils and coolants and suited for general industrial applications.

The grey module is ideally suited for hygienic and food applications due to the material used for the housing. It has the high protection rating IP 68 / IP 69K.



## Powerful inputs/outputs

The unit features six or ten M12 ports with two digital inputs or outputs each.

## Output modules

They are supplied from two independent, electrically isolated voltage sources. The left-hand M12 sockets are supplied via pins 1 and 3 of the supply connector and the right-hand M12 sockets via pins 2 and 4.

Both voltage supplies can be loaded with max. 1.8 A. The output current is distributed to the outputs according to the connected loads and is limited to 1.8 A total current per channel.








## Input modules

A special feature of the modules is the pre-processing of the input signals via different filters before passing them on to IO-Link.


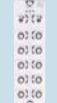

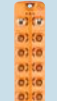
The following filters are available: debouncing (suppress noise signals), stretching (longer signals), inverting.

This allows reliable detection of signals with a minimum length of 1.5 ms.




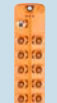
## Accessories

Design	Description	Order no.
<b>IO-Link</b>		
	IO-Link master with PROFINET interface	AL1100
	USB IO-Link master for parameter setting and analysis of units Supported communication protocols: IO-Link (4.8, 38.4 and 230 kbits/s)	E30390
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	QA0011
<b>Connection technology</b>		
	Y connection cable, M12, 1 m PUR cable, halogen-free	EVC431
	Y connection cable, M12, 1 m MPPE cable, halogen-free	EVF329
	Y splitter, Coolant 1 x M12 connector, 2 x M12 socket, PA, brass	EBC115
	Y splitter, Food 1 x M12 connector, 2 x M12 socket, PP, stainless steel (1.4404 / 316L)	EBF008

## Output modules

Type	Description	Order no.
<b>Active IO-Link output module, Hygienic and food applications</b>		
	IO-Link device V1.1, separate voltage supply 2 x Uaux, 6 x 2 outputs; M12 connector, O-ring, stainless steel thread, IP 68 / IP 69K	AL2230
	IO-Link device V1.1, separate voltage supply 2 x Uaux, 10 x 2 outputs; M12 connector, O-ring, stainless steel thread, IP 68 / IP 69K	AL2231
<b>Active IO-Link output module, Oils and coolants</b>		
	IO-Link device V1.1, separate voltage supply 2 x Uaux, 6 x 2 outputs; M12 connector, O-ring, nickel-plated brass thread, IP 67	AL2330
	IO-Link device V1.1, separate voltage supply 2 x Uaux, 10 x 2 outputs; M12 connector, O-ring, nickel-plated brass thread, IP 67	AL2331

## Input modules

Design	Description	Order no.
<b>Active IO-Link input module, hygienic and food applications</b>		
	IO-Link device V1.1; 6 x 2 inputs; M12 connector; O-ring; stainless steel thread; IP 68, IP 69K	AL2240
	IO-Link device V1.1; 10 x 2 inputs; M12 connector; O-ring; stainless steel thread; IP 68, IP 69K	AL2241
<b>Active IO-Link input module, oils and coolants</b>		
	IO-Link device V1.1; 6 x 2 inputs; M12 connector; O-ring; stainless steel thread; IP 67	AL2340
	IO-Link device V1.1; 10 x 2 inputs; M12 connector; O-ring; stainless steel thread; IP 67	AL2341