



# Smooth flow of information

Field-compatible IO-Link master with OPC UA server

- Integrated IODD interpreter converts sensor data into readable information
- Direct data transfer to on-premises IT levels via OPC UA
- Fieldbus multiprotocol with PROFINET and EtherNet/IP provides flexibility in the choice of controller



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Description	Order no.	
	Coolant (orange)	Food (grey)
<b>SolutionBlock</b>		
PROFINET, EtherNet/IP, OPC UA	<b>AL1590</b>	<b>AL1591</b>

**Multiprotocol capability provides flexibility in the choice of controller**

The field-compatible SolutionBlock IO-Link master makes system digitalisation more convenient than ever: The multiprotocol capability allows free selection of PROFINET or EtherNet/IP as fieldbus, which makes connection to different controllers more flexible and reduces stock-keeping.

**OPC UA server and IODD interpreter integrated in the master**

In addition, the integrated OPC UA server and the additional IoT port ensure an uncomplicated, direct connection to the IT level. Thanks to the integrated IODD interpreter, the sensor data is converted into readable information directly in the IO-Link master, making software-supported data evaluation even easier.

**Data reduction thanks to the moneo|configure plug-in**

The moneo|configure plug-in makes it possible to select and reduce the cyclic data of an IO-Link device. The SolutionBlock IO-Link master receives all process values from the IO-Link devices, but only forwards the selected information to the controller. This significantly reduces cyclic data communication on the fieldbus.

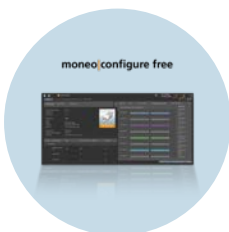
**Powerful and easy to connect**

To minimise the need for cables, the SolutionBlock IO-Link master is equipped with a daisy chain functionality for both voltage supply with a maximum of 16 A via L-coding and for fieldbus and IoT communication, which enables the masters to be connected in series. Four A ports and four B ports provide sufficient options for connecting sensors and actuators.

Technical data	
Voltage supply	M12, L-code, 16 A (US), 16 A (UA) daisy chain option
Fieldbus port	M12, D-code PROFINET, EtherNet/IP, daisy chain option
IoT port	M12, D-code OPC UA, HTTP(S), MQTT, JSON daisy chain option
IO-Link ports	4 A ports, 4 B ports
Number of inputs and outputs	12 DI / 12 DO
<b>Current rating of the outputs</b>	
UA (total / port)	[A] 4 / 4
US (total / port)	[A] 3.9 / 2
<b>Coolant (orange)</b>	
Protection rating	IP67
Housing	polyamide
Socket / connector	nickel-plated brass
<b>Food (grey)</b>	
Protection rating	IP69K
Housing	polyamide
Socket / connector	stainless steel

**BEST FRIENDS**

We reserve the right to make technical alterations without prior notice. -04.2025  
ifm electronic gmbh · Friedrichstr. 1 · 45128 Essen



**moneo|configure free**  
Software for parameter setting of the IO-Link infrastructure



**IP67 power supply**  
24 volt supply in the field, controllable via IO-Link



**Ethernet switch**  
Extends the vehicle infrastructure by 6 ports



For further technical details, please visit: [ifm.com/fs/AL1590](http://ifm.com/fs/AL1590)