IO-Link master for intelligent sensors in the control cabinet

IO-Link masters CabinetLine

Separation between automation and IT network

Industry 4.0 ready via new IoT core

8 IO-Link ports with full V1.1 functionality

PROFINET, EthernNet/IP, EtherCat, Modbus TCP, TCP/IP JSON or Powerlink

Master and device configurable via the LR DEVICE software

IO-Link master for the automation and IT world

The IO-Link master modules for the control cabinet serve as a gateway between intelligent IO-Link sensors and the field bus. Besides, important information of the intelligent sensors can simultaneously be sent into the IT world.

With a separate IoT Ethernet socket the IT network can be set up completely separated from the automation network. Sensor information is transferred into the IT world via the established TCP/IP JSON interface.

Advantages and customer benefits

- **Separation between automation and IT network**

  Machine uptime is of highest priority. The automation network must by no means be interrupted by external factors. Therefore the unit features a separate IoT Ethernet socket separating IT and automation network. This means that important sensor information can be safely sent to the IT and ERP systems.

- **Sensor configuration with LR DEVICE**

  The intuitive software finds all IO-Link masters in the network and creates an overview of the whole plant. In addition, all connected sensors are displayed with the respective parameters. This makes it possible to set the parameters of all sensors in the system from one central point.

- **Easy sensor connection**

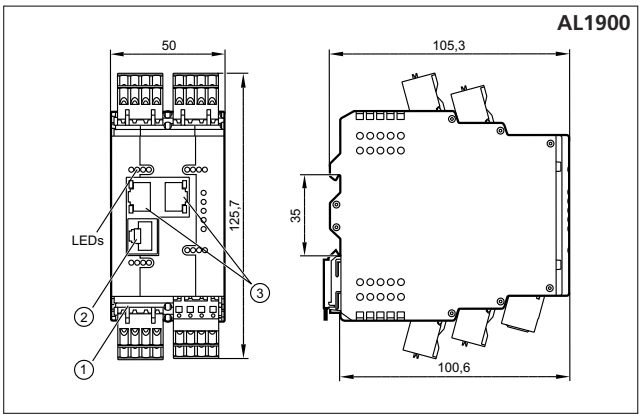
  The sensors and actuators are connected via standard M12 connection cables without screening. The connection cables are fixed via removable COMBICON connectors on the IO-Link master. Up to 8 IO-Link sensors can be connected and be supplied with up to 3.6 A. The cable can be up to 20 m long.

- **Reliable digital data**

  The sensor data is transferred digitally.
  Unlike analogue signals, contact resistance and EMC interference cannot corrupt the signals.

Dimensions

AL1900



1) Combicon connector
2) IoT-Port
3) Profinet IO data interface

The products

Type	Description	Order no.
IO-Link master CabinetLine		
	PROFINET + IoT 8-port	**AL1900**
	EtherNet/IP + IoT 8-port	**AL1920**
	EtherCat + IoT 8-port	**AL1930**
	Modbus TCP + IoT 8-port	**AL1940**
	Powerlink + IoT 8 Port	**AL1970**
	IoT only 8-port	**AL1950**

Technical data

IO-Link master CabinetLine AL1900, AL1920, AL1930, AL1940, AL1970		
Operating voltage	[V DC]	20...30
Total current consumption	[A]	≤ 3.9
IO-Link version		1.1
Number of IO-Link ports		8 A ports
Number of binary inputs		8 + 8
Number of binary inputs		8
Parameter memory		•
Current for all ports (device supply)	[A]	≤ 3.6
Protection		IP 20
Electrical connections		COMBICON connector
Installation		DIN rail
Ambient temperature	[°C]	-25...65
Dimensions	[mm]	114.2 x 50 x 105.3

Accessories

Type	Description	Order no.
	LR DEVICE (supplied on USB flash drive) Software for online and offline parameter setting of IO-Link sensors and actuators	**QA0011**
	Ethernet adapter M12 / RJ45	**E21140**

Connection technology

Type	Description	Order no.
M12 socket		
	1 m black, PUR cable	**EVC471**
	2 m black, PUR cable	**EVC001**
	5 m black, PUR cable	**EVC002**
	10 m black, PUR cable	**EVC003**
	20 m black, PUR cable	**EVC083**