

Industrial Communication





Real-time data communication up to field level

The possibilities of industrial data communication are various. They range from simple PNP signal transmission to integration of IO-link capable products to integration of products with integrated Ethernet interface and Power Over Ethernet. With their range of innovative Industrial Ethernet products wenglor was the first sensor manufacturer to make it possible to transmit process and parameter data from sensors and actuators directly to the control. This ensures continuous data communication in real time up to field level.

Ethernet system advantages

The wenglor Ethernet products are available in the protocols PROFI-NET, EtherNet/IP™, and EtherCAT. They are responsible for transmitting the high-precision measured values to the control.

Wiring effort and installation costs are significantly reduced as data transfer and power supply of the wenglor PoE (Power Over Ethernet) sensors are realized via one single cable and an 8-pin M12×1 Ethernet connector suitable for use in the field. The web server integrated in the products provides worldwide access to the device-own website of the relevant product. This gives quick and easy access to process and parameter data without additional software.

Extensions of the system are possible at any time. The way the components are linked to each other can be adjusted to the relevant topology in a flexible and individual manner. As every correspondingly standardized product can be connected, even components by other manufacturers can be integrated in the Ethernet complete system by wenglor.

Plug and Play allows quick and easy exchange of devices.

The high degree of protection IP67 and vibration resistance of all wenglor Ethernet products allows them to be used in demanding industrial environments.

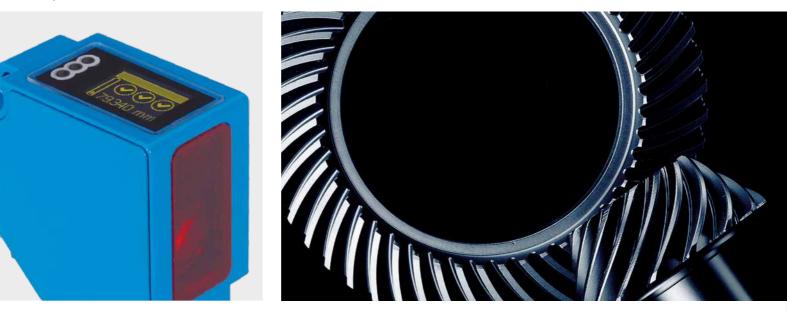
Ethernet sensors at a glance

High-performance distance sensors

- High technology in a miniature design
- Precise laser sensor with a reproducibility from 15 μ m and a linearity deviation from 50 μ m for standard application
- Maximum precision up to 660 mm for series application

Order number	OCP801P0150x	OCP162P0150x	OCP352P0150x	OCP662P0150x		
Working range	3080 mm	40160 mm	50350 mm	60660 mm		
Reproducibility	15…50 μm	2070 μm	20…150 μm	70…1000 μm		
Linearity deviation	50…100 μm	50…160 μm	100…500 μm	100…1000 μm		
Design	50×50×30 mm					
Housing material	Metal					
Connection	M12×1, 8-pin					
Light source	Laser red, laser class 1					
Interface	PROFINET, EtherNet/IP™, EtherCAT					

Replace order number "x" with: P for PROFINET, E for EtherNet/IP™ or C for EtherCAT



High-performance distance sensors with WinTec

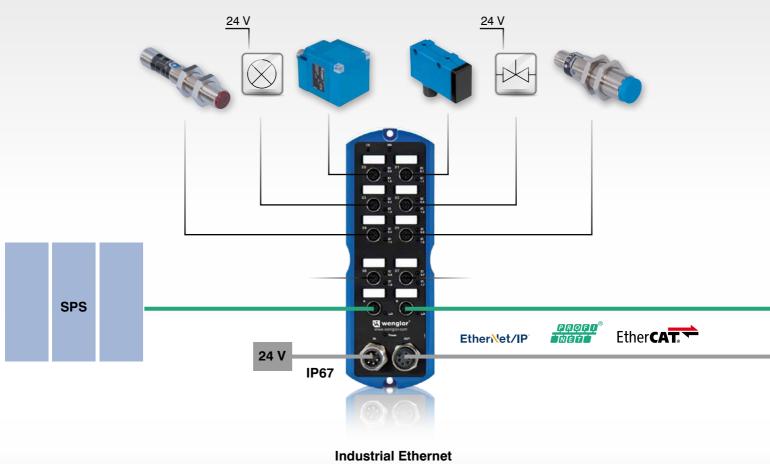
- Reliably detect and measure black and shiny objects up to 10.1m even in extremely inclined positions depending on the surface characteristics and the distance from an angle of up to 89°
- No mutual interference of multiple sensors

Order number	OY2TA104P0150x
Working range	0.110.1 m
Reproducibility	9 mm
Linearity deviation	20 mm
Design	55×81×30 mm
Housing material	Plastic
Connection	M12×1, 8-pin
Light source	Laser red, laser class 1
Interface	PROFINET, EtherNet/IP™, EtherCAT

Replace order number "x" with: P for PROFINET, E for EtherNet/IP™ or C for EtherCAT

Continuous communication up to field level ...

... from **simple PNP** signal transmission ...



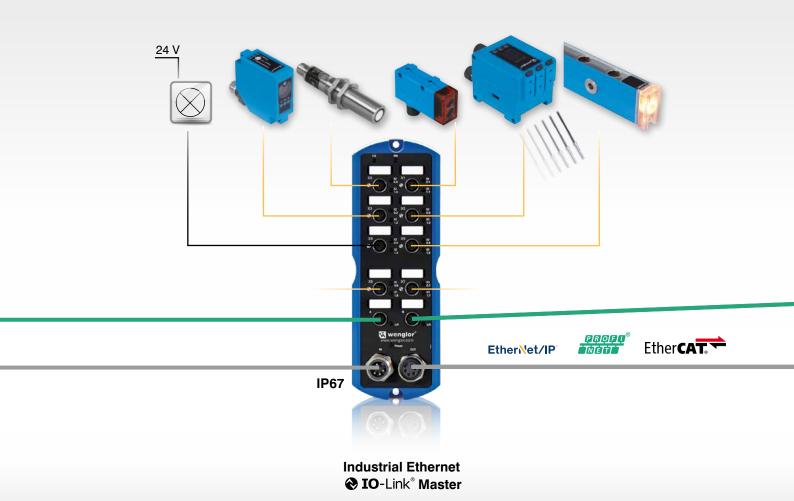
Connection Box

Connection Box	Industrial Ethernet	Number of Industrial Ethernet ports	Number of digital I/O ports	Number of input/output pins	Connection mode supply voltage	Connection mode Industrial Ethernet ports	Connection mode digital I/O ports
ZAI02xN01	~	2	8	16	2×7/8", 5-pin	2×M12, 4-pin	8×M12, 4-pin

Replace order number "x" with: P for PROFINET, E for EtherNet/IP[™] or C for EtherCAT

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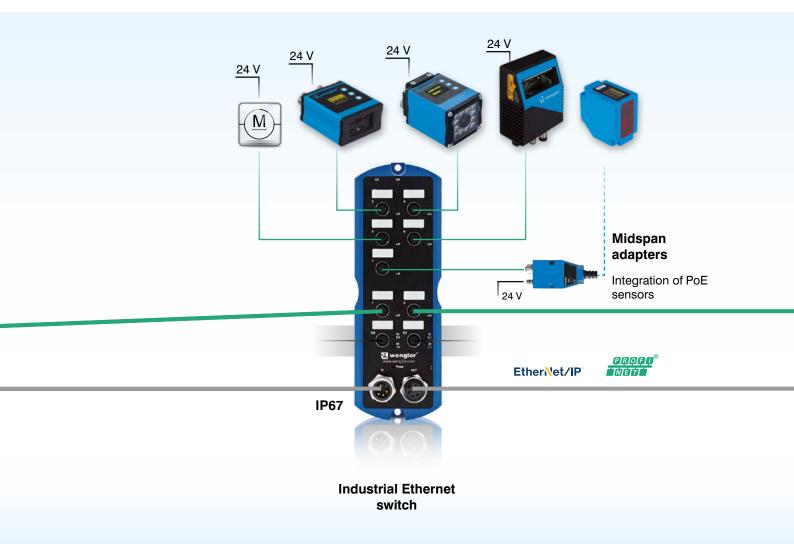
... to integration of **IO-Link**[®] capable products ...



Connection of 8 configurable sensors and actuators via **O IO-Link**[®]

IO-link master	Industrial Ethernet	Number of Industrial Eth- ernet ports	Number of digital I/O ports	Number of input/output pins	Number of IO-link capable ports	Connection mode supply voltage	Connection mode Indus- trial Ethernet ports	Connection mode digital I/O ports
EP0L001	PROFINET	2	8	16	8	2×7/8", 5-pin	2×M12, 4-pin	8×M12, 4-pin
EP0L002	EtherCAT	2	8	16	8	2×7/8", 5-pin	2×M12, 4-pin	8×M12, 4-pin
EP0L003	EtherNet/IP™	2	8	16	8	2×7/8", 5-pin	2×M12, 4-pin	8×M12, 4-pin

... to the integration of high-end products with integrated Ethernet interface ...



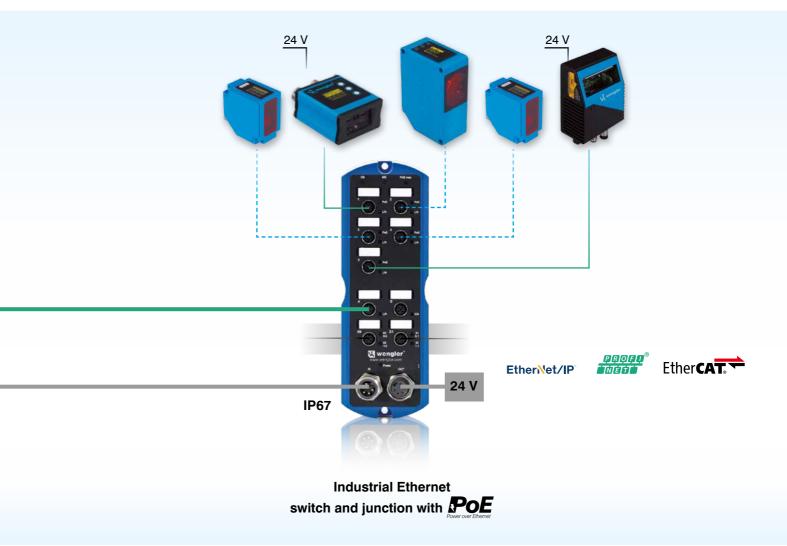
Connection of **7 Industrial Ethernet** products, **2 additional digital I/O ports** for **PNP sensors** and **actuators**

Switch/Junction	Industrial Ethernet	Power over Ethernet	Number of Industrial Ethernet ports	Number of PoE-capable ports	Number of addition digital I/O ports
ZAC51xN01	✓	—	7	—	2
ZAC50xN01	✓	✓	7	5	2
ZAC50xN02	~	~	4	2	2

Replace order number "x" with: P for PROFINET, E for EtherNet/IP™ or C for EtherCAT. EtherCAT is not available for ZAC51xN01.







Connection of 7 Industrial Ethernet products of which 5 Poe ports

al	Number of input/output pins	Connection mode supply voltage	Connection mode Industrial Ethernet ports	Connection mode PoE ports	Connection mode digital I/O ports
	4	2×7/8", 5-pin	7×M12, 4-pin	—	2×M12, 4-pin
	4	2×7/8", 5-pin	2×M12, 4-pin	5×M12, 8-pin	2×M12, 4-pin
	4	2×7/8", 5-pin	2×M12, 4-pin	2×M12, 8-pin	2×M12, 4-pin



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