Data sheet

SIG350-0004AP100

SIG350

NETWORK DEVICES

SICK
Sensor Intelligence.

Ordering information

Type	part no.
SIG350-0004AP100	6076871

Other models and accessories ➜ www.sick.com/SIG350

Detailed technical data

Features

Product category	IO-Link Master
Supported products	IO-Link Devices Binary switching sensors Binary actuators
Further functions	Web server integrated IIoT interface available (dual talk)
Items supplied	SIG350-0004AP100, Marking labels, quickstart

Mechanics/electronics

Connections	
IO-Link	8 x M12, 5-pin female connector, A-coded
Power	1 x M12, 5-pin male connector, L-coded1 x M12, 5-pin female connector, L-coded
Ethernet	2 x M12, 4-pin female connector, D-coded
Power voltage supply	
Supply voltage	18 V DC ... 30 V DC [1]
Current carrying capacity (PWR1, PWR2) max.	≤ 16 A, U_S [2]
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Current consumption	≤ 180 mA [3]
Voltage supply U_S (sensors)	
Total current (S1 ... S8)	≤ 10 A [2]
Voltage supply (pin 1)	2 A
Output current (DO) (pin 2 + pin 4)	2 A

[1] Each for U_S and U_A, typ. supply voltage 24 V DC.
[2] ≤ +40 °C (see “Derating” information in operating instructions).
[3] Without load, sensors and outputs switched off.
[4] When using a SELV or PELV power supply unit.

Current carrying capacity per port max.	4 A
Voltage supply U_A (actuators)	
Total current (S1 ... S8)	≤ 10 A [2]
Voltage supply (pin 2)	2 A
Current carrying capacity per port max.	4 A
Digital inputs	
Number	16, configurable
Input characteristics	EN 61131-2 type 1 and type 3
Type	PNP
Filter time	0 ms ... 15 ms
Delay time at signal change	2 ms ... 5 ms
Circuit protection	Short-circuit protected (MOSFET with current measurement)
Digital outputs	
Number	16, configurable
Type	PNP
Switching frequency	≤ 50 Hz
Circuit protection	Short-circuit protected (MOSFET with current measurement)
Optical indicators	8 LED green/yellow/red (Communication pin 4) 8 LED yellow/red (Communication pin 2) 1 LED green/red (device status) 1 LED green/yellow (Network status) 1 LED green (PLC operational status) 1 LED red (PLC configuration) 3 LED green (PLC configuration) 2 LED green/red (power supply)
Enclosure rating	IP67 (In fastened condition)
Protection class	III [4]
Contamination rating	2
Housing material	Plastic (Valox 553)
Housing color	Dark gray
Weight	486 g
Dimensions (L x W x H)	225 mm x 63 mm x 37.4 mm
UL File No.	E238799

[1] Each for U_S and U_A, typ. supply voltage 24 V DC.

[2] ≤ +40 °C (see “Derating” information in operating instructions).

[3] Without load, sensors and outputs switched off.

[4] When using a SELV or PELV power supply unit.

Communication interface

IO-Link	✓
Remark	V1.1
Number of ports	8
Port Class	A/B [1]
Data transmission rate	COM1, COM2, COM3

[1] Freely configurable per port, no galvanic separation between U_S and U_A.

Additional features	Data Storage
Ethernet	✓
Remark	TCP/IP
PROFINET	✓
Remark	TCP/IP
Number of ports	2
Data transmission rate	10/100 MBit/s
Additional features	Fast start up (FSU)
Conformity class	C
Specification	V2.3 (RT, IRT forwarding)
Network load class	III
Cycle time	≥ 1 ms
Addressing	DCP, rotary switch
Factory setting	Static IP address
REST API	✓
Specification	JSON integration for IO-Link version (V1.0.0)
MQTT	✓
Specification	JSON integration for IO-Link version (V1.0.0)
OPC UA	✓
Specification	IO-Link Companion Specification Version (V1.0)
Operator interfaces	Web server integrated

[1] Freely configurable per port, no galvanic separation between U_S and U_A.

Ambient data

Ambient operating temperature	–25 °C ... +70 °C [1]
Ambient temperature, storage	–40 °C ... +80 °C [1]
Electromagnetic compatibility (EMC)	EN 61000-6-2:2016 / EN 61000-6-4:2020
Shock load	EN 60068-2-27

[1] Permissible relative humidity 0% ... 95% (non-condensing).

Certificates

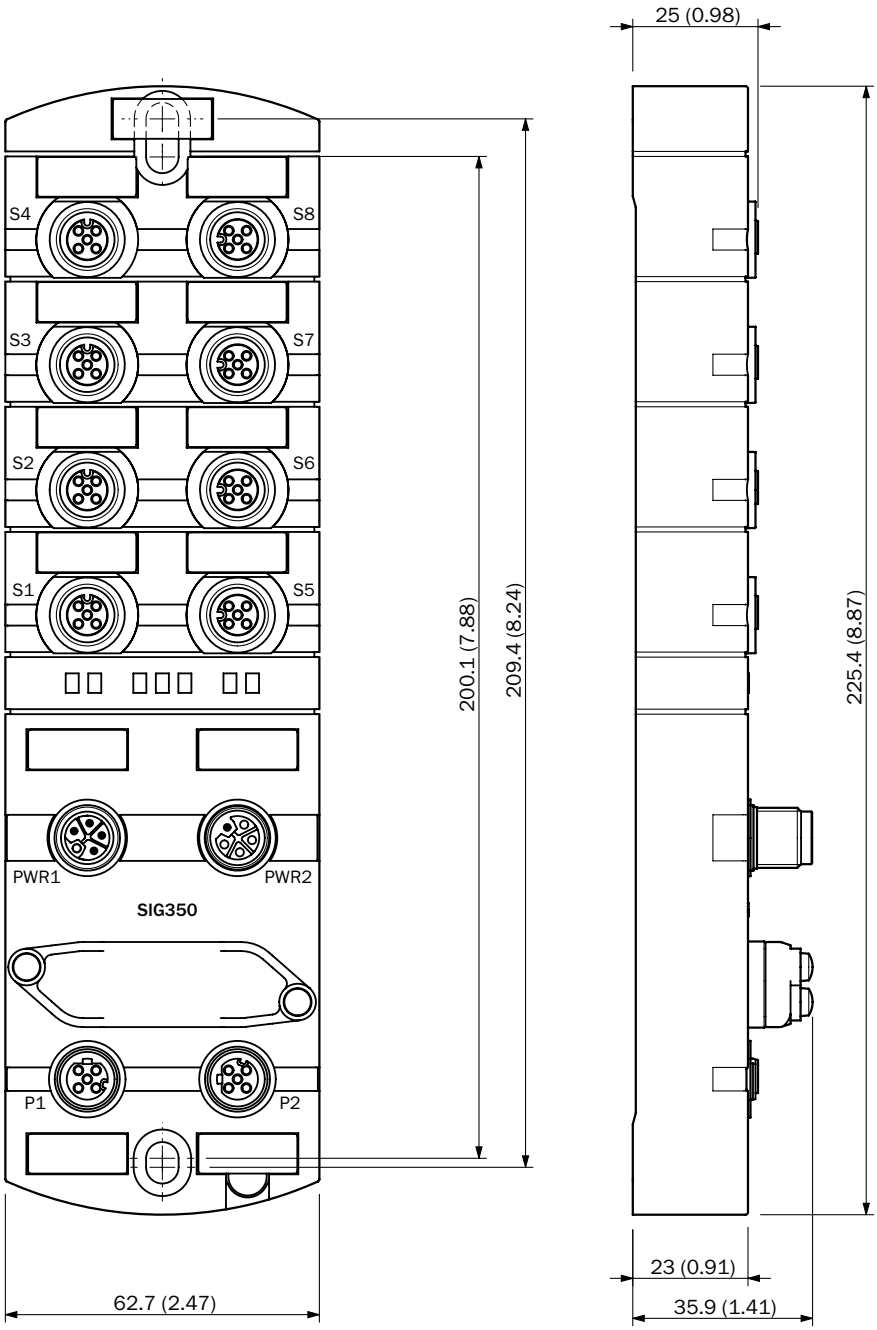
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
China-RoHS	✓
cULus certificate	✓

Classifications

ECLASS 5.0	27242208
ECLASS 5.1.4	27242608
ECLASS 6.0	27242608
ECLASS 6.2	27242608
ECLASS 7.0	27242608

ECLASS 8.0	27242608
ECLASS 8.1	27242608
ECLASS 9.0	27242608
ECLASS 10.0	27242608
ECLASS 11.0	27242608
ECLASS 12.0	27242608
ETIM 5.0	EC001604
ETIM 6.0	EC001604
ETIM 7.0	EC001604
ETIM 8.0	EC001604
UNSPSC 16.0901	32151705

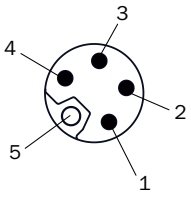
Dimensional drawing



Dimensions in mm (inch)

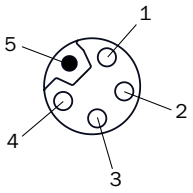
Connection diagram Cd-535

Power PWR1



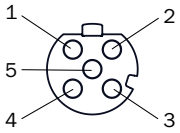
BN	1 + (L+) U_S
WH	2 - (M)
BU	3 - (M)
BK	4 + (L+) U_A
GY	5 FE

Power PWR2



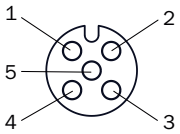
BN	1 + (L+) U_S
WH	2 - (M)
BU	3 - (M)
BK	4 + (L+) U_A
GY	5 FE

Ports P1 / P2



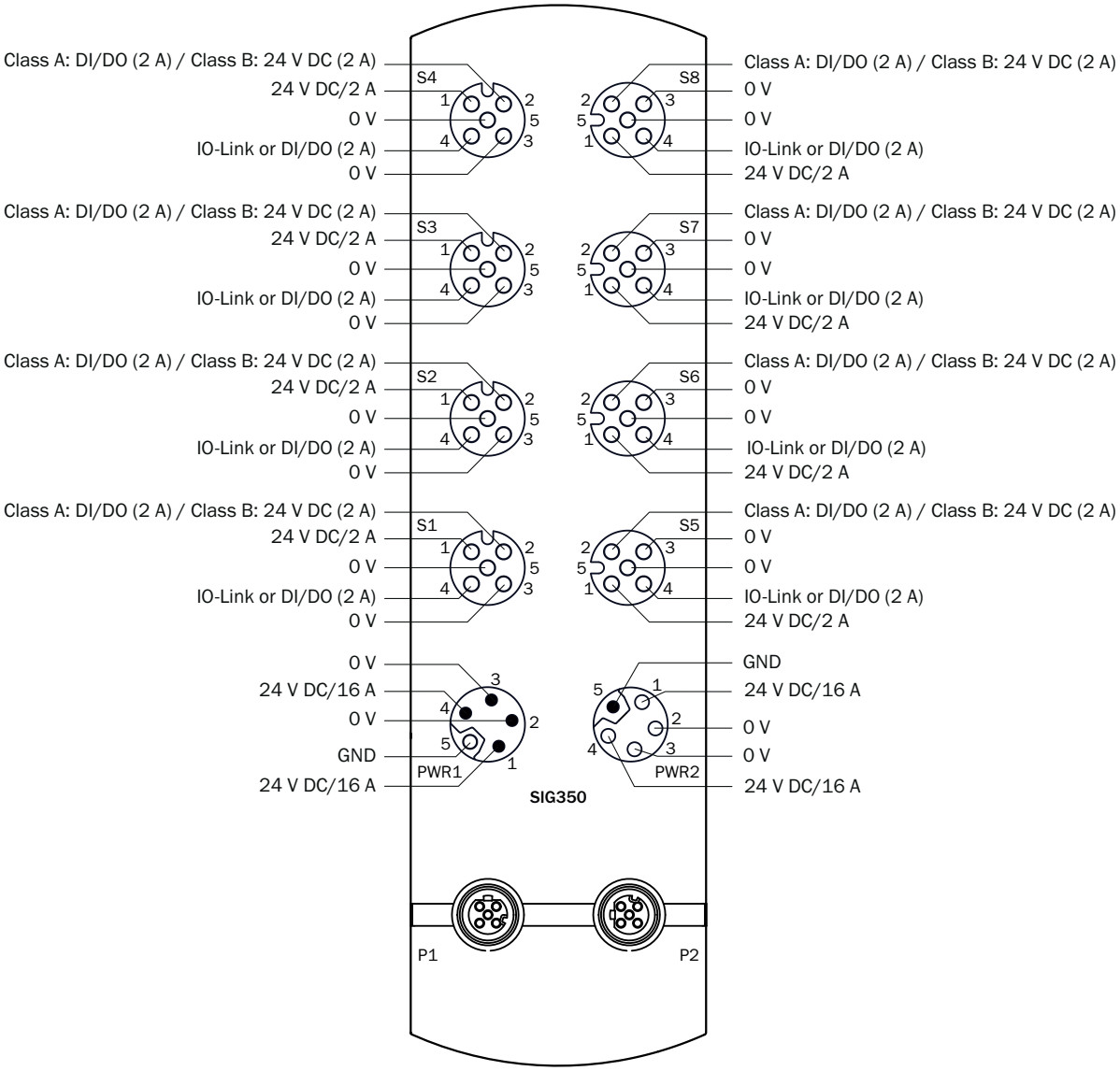
YE	1 Tx +
WH	2 Rx +
OG	3 Tx -
BU	4 Rx -
	5 not connected

S1 ... S8



BN	1 + (L+)
WH	2 DI/DO
BU	3 - (M)
BK	4 IO-Link or DI/DO
GY	5 - (M)

PIN assignment



Recommended accessories

Other models and accessories ➜ www.sick.com/SIG350

	Brief description	Type	part no.
device protection and care			
	• **Description:** Protective cap for M12 socket or unused ports	DOS-12SK	5309189

	Brief description	Type	part no.
connectors and cables			
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, A-coded • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-010UB3M2A14	2095997
	• **Connection type head A:** Female connector, M12, 4-pin, straight, A-coded • **Connection type head B:** Male connector, M12, 4-pin, straight, A-coded • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 4-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2A14-050UB3M2A14	2096001
	• **Connection type head A:** Female connector, M12, 5-pin, straight, L-coded • **Connection type head B:** Flying leads • **Signal type:** Sensor/actuator cable • **Cable:** 5 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2L15-050UH1XLEAX	2099626
	• **Connection type head A:** Male connector, M12, 5-pin, A-coded • **Connection type head B:** Female connector, M12, 4-pin, A-coded • **Connection type head C:** Female connector, M12, 4-pin, A-coded • **Description:** Unshielded	YM2A15-000S01FY2A4	2099600
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 4-pin, straight • **Signal type:** Ethernet, EtherNet/IP™ • **Cable:** 1 m, 4-wire, TPE • **Description:** Ethernet, shielded, EtherNet/IP™ • **Application:** Drag chain operation, Robot, Zones with oils and lubricants	YM2D24-010E-F4MRJA4	2112844
	• **Connection type head A:** Male connector, M12, 4-pin, straight, D-coded • **Connection type head B:** Male connector, RJ45, 4-pin, straight • **Signal type:** Ethernet, PROFINET • **Cable:** 2 m, 4-wire, PUR, halogen-free • **Description:** Ethernet, shielded, PROFINET • **Application:** Drag chain operation, Zones with oils and lubricants	YM2D24-020P-N1MRJA4	2106182
	• **Connection type head A:** Female connector, M12, 5-pin, straight, L-coded • **Connection type head B:** Male connector, M12, 5-pin, straight, L-coded • **Signal type:** Sensor/actuator cable • **Cable:** 1 m, 5-wire, PUR, halogen-free • **Description:** Sensor/actuator cable, unshielded • **Application:** Uncontaminated zones, Zones with oils and lubricants, Robot, Drag chain operation	YF2L15-010UK1M2L15	2125147

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

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