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DATA SHEET

SIG300-0A0GAA100

SIG300
Network devices

SICK Sensor Intelligence



NETWORK DEVICES

SIG300-0A0GAA100

ORDERING INFORMATION

Type	part no.
SIG300-0A0GAA100	1131014

Further device versions and accessories at www.sick.com/SIG300

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
MTTF	29.4 years [1]
MTTFd	58.8 years [1]
Items supplied	SIG300, safety instruction, Blind plugs (9 x M12, 1 x USB-C)

[1] The specified values are estimates. These are not exact calculations.

MECHANICS/ELECTRONICS

Connections	
IO-Link	8 x M12, 5-pin female connector, A-coded
Power	1 x M12, 5-pin male connector, L-coded 1 x M12, 5-pin female connector, L-coded
Ethernet	2 x M12, 4-pin female connector, D-coded
USB-C	1 x USB-C
Power voltage supply	
Supply voltage	20 V DC ... 30 V DC [1]
Current carrying capacity (PWR1, PWR2) max.	≤ 16 A, U_S [2] ≤ 16 A, U_A [2]
Current consumption	≤ 200 mA [3]

[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.

Total current (S1 ... S8)	≤ 15.5 A [2]
Pin assignment for class A port (S1-S6)	
Pin 1 (L+) (Us)	2 A
Pin 2 (DI/DO)	200 mA
Pin 3 (M)	- 2.6 A
Pin 4 (C/Q DI/DO)	200 mA
Pin 5 (DI/DO) Port 5-6	200 mA
Pin assignment for class B port (S7-S8)	
Pin 1 (L+) (Us)	2 A
Pin 2 (L+) (UA)	2 A
Pin 3 (M) (Us)	- 2 A
Pin 4 (C/Q DI/DO)	200 mA
Pin 5 (M) (UA)	- 2 A
Digital inputs	
Number	16, configurable
Input characteristics	EN 61131-2 type 1
Circuit protection	Short-circuit protected
Digital outputs	
Number	16, configurable
Type	PNP NPN Push-Pull
Switching frequency	≤ 50 Hz
Circuit protection	Short-circuit protected
Optical indicators	8 LED green (IO-Link activity pin 4) 6 LED yellow (DI/DO communication pin 2) 2 LED yellow (DI/DO communication pin 5) 2 LED yellow (Voltage supply U_A "On" pin 2, class B port) 2 LED green (Ethernet bus activity) 1 LED green (voltage supply U_S (sensors)) 1 LED green (voltage supply U_A (actuators))
Enclosure rating	IP67 (In fastened condition)
Protection class	III [4]
Contamination rating	2
Housing material	Polyamide + steel, galvanized
Housing color	Dark gray
Weight	460 g
Dimensions (L x W x H)	191.4 mm x 61.2 mm x 27.3 mm
UL File No.	E497722

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COMMUNICATION INTERFACE

IO-Link	✓
Remark	V1.1
Number of ports	8 pieces
Port Class	A/B
Data transmission rate	COM1, COM2, COM3
Additional features	Data Storage
Ethernet	✓
Fieldbus	✓
Number of ports	2 pieces
Data transmission rate	10/100 MBit/s
Cycle time	≥ 1 ms
Addressing	DCP, static IP address

Factory setting	DCP
REST API	✓
Specification	JSON integration for IO-Link version (V1.0.0)
OPC UA	✓
Remark	IO-Link Companion Specification Version (V1.0)
MQTT	✓
Operator interfaces	Web server integrated

AMBIENT DATA

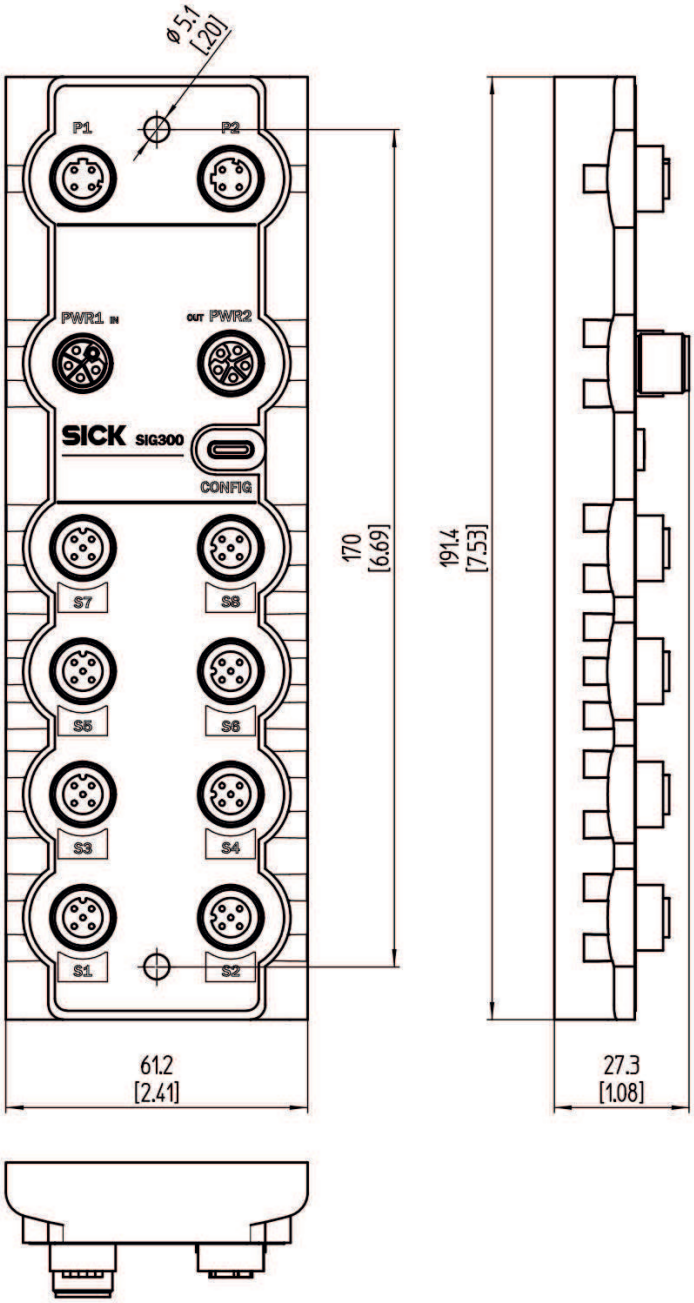
Ambient operating temperature	–40 °C ... +55 °C [1]
Ambient temperature, storage	–40 °C ... +75 °C [1]
Electromagnetic compatibility (EMC)	EN 61000-6-2:2016 EN 61000-6-4:2020
Shock load	EN 60068-2-27

[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	✓

DIMENSIONAL DRAWING



Dimensions in mm (inch)

Further information as well as suitable accessories, example applications and downloads such as CAD dimensional models, operating instructions and software can be found at www.sick.com/1131014

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SICK AT A GLANCE

SICK is a leading global technology company for intelligent sensors and integrated solutions in industrial automation. Our technologies set benchmarks, making your industrial processes more efficient, safer and more sustainable – both in logistics and manufacturing operations.

SICK combines sensor intelligence with industry expertise and certified consulting services. We provide the ideal foundation for scalable as well as tailor-made automation solutions and create added value along the entire value chain. Our close partnerships with our customers are more than just a promise: Together, we optimize productivity, improve quality, protect health and safety, and help build a sustainable future. All with empathy and trust.

Since 1946, we have been developing innovative technologies with passion and a pioneering spirit. With a global network in around 40 countries, SICK has a global presence and is always close by. The company's headquarters are located in Waldkirch near Freiburg, Germany. Our customers benefit from our understanding of both local and global requirements, which enables us to deliver tailor-made solutions

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