



SIG350-0005AP100

SIG350

NETWORK DEVICES

SICK
Sensor Intelligence.



Ordering information

| Type | part no. |
|------------------|----------|
| SIG350-0005AP100 | 6076923 |

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 | SIG350-0005AP100, 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-coded 1 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⁾ ≤ 16 A, U _A ²⁾ |
| 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 |
| EtherNet/IP™ | | ✓ |
| | Remark | TCP/IP |
| | Number of ports | 2 |
| | Data transmission rate | 10/100 MBit/s |
| | Additional features | Quick connect |
| | Conformity class | C |
| | Cycle time | ≥ 1 ms |
| | Addressing | BOOTP, DHCP, 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

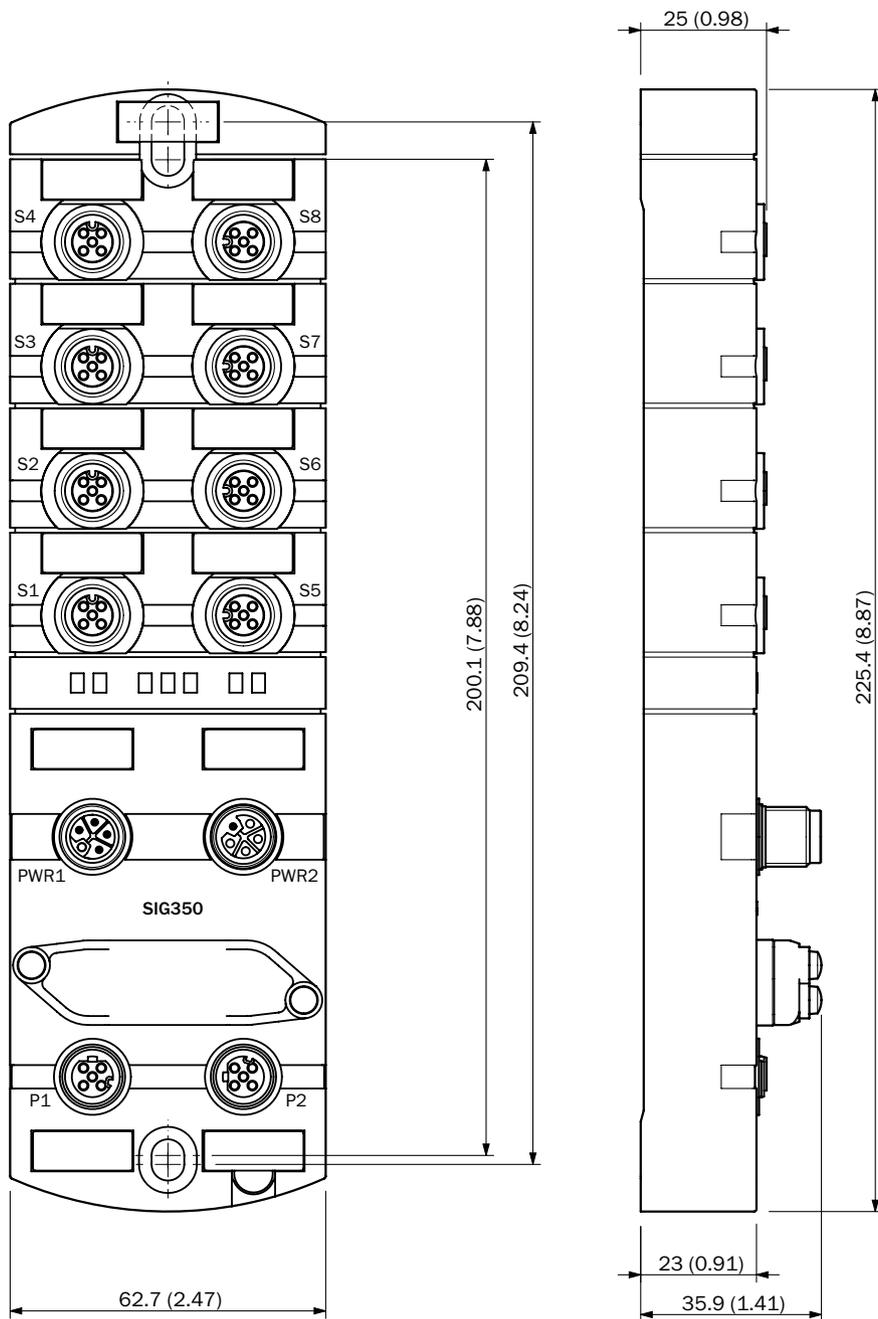
| | |
|---------------------------------------|---|
| EU declaration of conformity | ✓ |
| UK declaration of conformity | ✓ |
| ACMA declaration of conformity | ✓ |
| China-RoHS | ✓ |
| cULus certificate | ✓ |

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 |

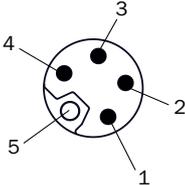
Dimensional drawing



Dimensions in mm (inch)

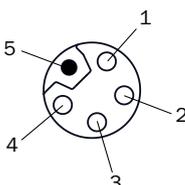
Connection diagram Cd-535

Power PWR1



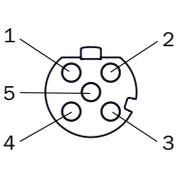
| | |
|----|-------------------------|
| BN | 1 + (L+) U _s |
| WH | 2 - (M) |
| BU | 3 - (M) |
| BK | 4 + (L+) U _A |
| GY | 5 FE ⚡ |

Power PWR2



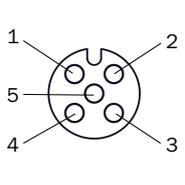
| | |
|----|-------------------------|
| BN | 1 + (L+) U _s |
| WH | 2 - (M) |
| BU | 3 - (M) |
| BK | 4 + (L+) U _A |
| GY | 5 FE ⚡ |

Ports P1 / P2



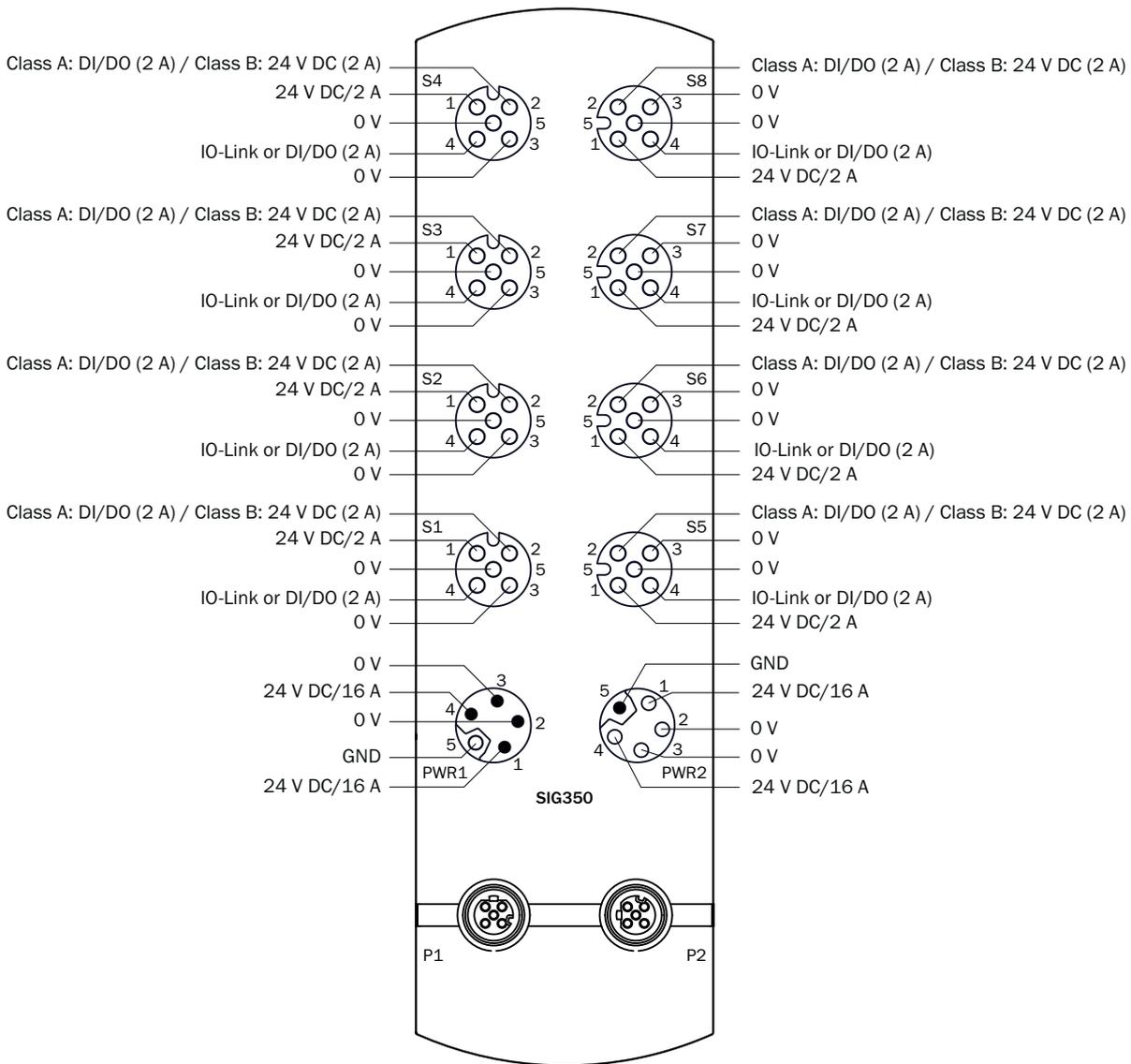
| | |
|-----|-----------------|
| YEL | 1 Tx + |
| WH | 2 Rx + |
| OG | 3 Tx - |
| BU | 4 Rx - |
| | 5 not connected |

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 | | | |
|  | <ul style="list-style-type: none"> Description: Protective cap for M12 socket or unused ports | DOS-12SK | 5309189 |

| | Brief description | Type | part no. |
|---|---|---------------------|----------|
| connectors and cables | | | |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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 |
|  | <ul style="list-style-type: none"> • 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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com