

C4P-SA12030A00

deTec

SAFETY LIGHT CURTAINS

SICK
Sensor Intelligence.

Illustration may differ

Ordering information

| Note | Resolution | Scanning range | Protective field height | System part | Type | Part no. |
|---|------------|----------------|-------------------------|-------------|----------------|----------|
| The system plug has to be ordered separately. For details, see "Accessories". | 30 mm | 30 m | 1,200 mm | Sender | C4P-SA12030A00 | 1215313 |

The system plug has to be ordered separately. For details, see "Accessories".

Other models and accessories → www.sick.com/deTec



Detailed technical data

Features

| | |
|---------------------------------------|-------------------------------|
| Application | Normal industrial environment |
| System part | Sender |
| Resolution | 30 mm |
| Scanning range | 30 m |
| Protective field height | 1,200 mm |
| No blind zones | Yes |
| Synchronization | Optical synchronisation |
| Integrated laser alignment aid | ✓ |
| Items supplied | Sender |

Safety-related parameters

| | |
|---|--|
| Type | Type 4 (IEC 61496-1) |
| Safety integrity level | SIL3 (IEC 61508) SILCL3 (IEC 62061) |
| Category | Category 4 (ISO 13849-1) |
| Performance level | PL e (ISO 13849-1) |
| PFH_D (mean probability of a dangerous failure per hour) | |
| Single device | 9.6 x 10 ⁻⁹ |
| Cascade with one guest | 1.9 x 10 ⁻⁸ |
| Cascade with two guest devices | 2.9 x 10 ⁻⁸ |
| T_M (mission time) | 20 years (ISO 13849-1) |
| Safe state in the event of a fault | At least one OSSD is in the OFF state. |

Functions

| | |
|-----------------------------|---|
| Protective operation | ✓ |
|-----------------------------|---|

| | |
|--|---|
| Automatic calibration of the protective field width | ✓ |
| Beam coding | ✓ |
| Cascading | ✓ |

Interfaces

| | |
|-----------------------------|---|
| System connection | Depending on system plug (M12 male connector, 5-pin or 8-pin) |
| Extension connection | Depending on system plug (without extension connection or with M12 female connector, 5-pin) |
| Configuration method | DIP switch on system plug |
| Display elements | LEDs |

Electrical data

| | |
|--|-----------------------------|
| Protection class | III (IEC 61140) |
| Supply voltage V_s | 24 V DC (19.2 V ... 28.8 V) |
| Ripple | ≤ 10 % |
| Power consumption typical | 1.68 W (DC) |

Mechanical data

| | |
|-------------------------|---------------------------|
| Dimensions | See dimensional drawing |
| Housing material | Aluminum extruded profile |

Ambient data

| | |
|--------------------------------------|--------------------------------------|
| Enclosure rating | IP65 (IEC 60529) IP67 (IEC 60529) |
| Ambient operating temperature | -30 °C ... +55 °C |
| Storage temperature | -30 °C ... +70 °C |
| Air humidity | 15 % ... 95 %, Non-condensing |
| Vibration resistance | 5 g, 10 Hz ... 55 Hz (IEC 60068-2-6) |
| Shock resistance | 10 g, 16 ms (IEC 60068-2-27) |

Other information

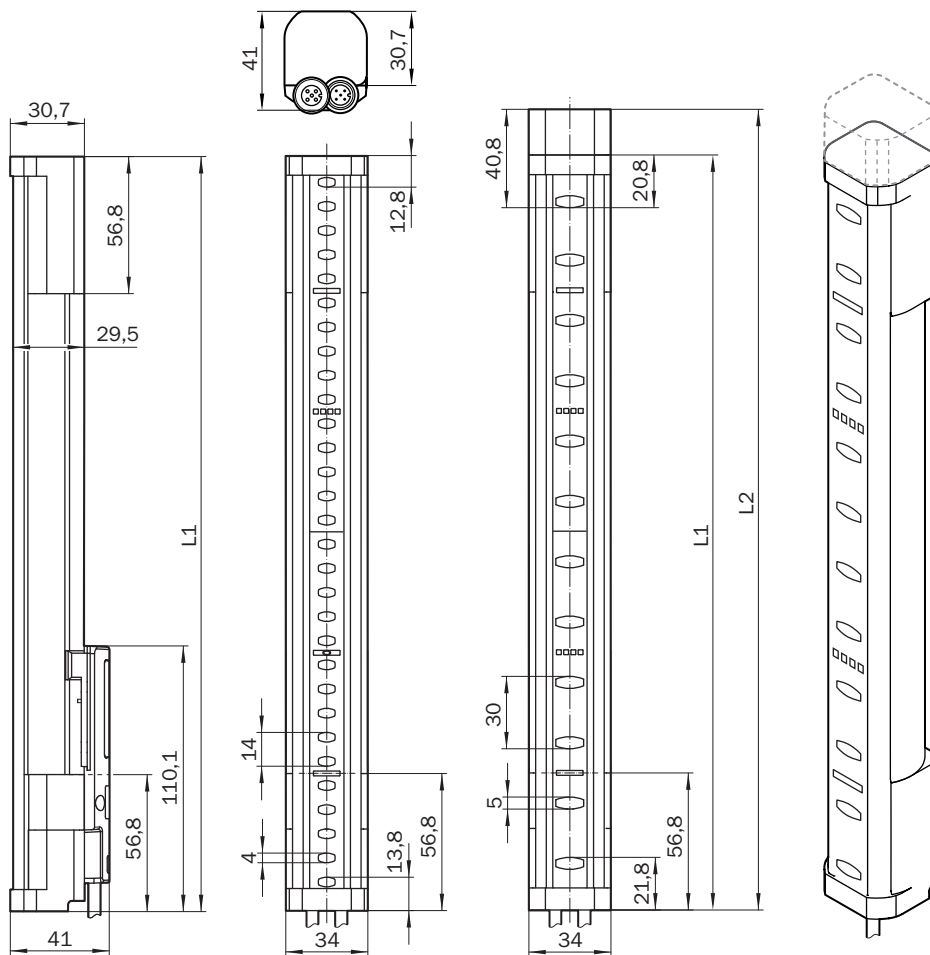
| | |
|---------------------------------------|--------------------------------|
| Wave length | 850 nm |
| Type of light | Near-infrared (NIR), invisible |
| Integrated laser alignment aid | ✓ |
| Laser class | 1 |
| Wave length | 650 nm |
| Type of light | Visible red light |

Classifications

| | |
|---------------------|----------|
| eCl@ss 5.0 | 27272704 |
| eCl@ss 5.1.4 | 27272704 |
| eCl@ss 6.0 | 27272704 |
| eCl@ss 6.2 | 27272704 |
| eCl@ss 7.0 | 27272704 |
| eCl@ss 8.0 | 27272704 |
| eCl@ss 8.1 | 27272704 |
| eCl@ss 9.0 | 27272704 |

| | |
|-----------------------|----------|
| eCl@ss 10.0 | 27272704 |
| eCl@ss 11.0 | 27272704 |
| eCl@ss 12.0 | 27272704 |
| ETIM 5.0 | EC002549 |
| ETIM 6.0 | EC002549 |
| ETIM 7.0 | EC002549 |
| ETIM 8.0 | EC002549 |
| UNSPSC 16.0901 | 46171620 |

Dimensional drawing (Dimensions in mm (inch))











| Protective field height | L1 | L2 |
|-------------------------|---------------|--------------|
| 300 (11.81) | 313 (12.32) | 332 (13.07) |
| 450 (17.72) | 463 (18.23) | 482 (18.98) |
| 600 (23.62) | 613 (24.13) | 632 (24.88) |
| 750 (29.53) | 763 (30.04) | 782 (30.79) |
| 900 (35.43) | 913 (35.94) | 932 (36.69) |
| 1,050 (41.34) | 1,063 (41.85) | 1,082 (42.6) |

| Protective field height | L1 | L2 |
|-------------------------|---------------|---------------|
| 1,200 (47.24) | 1,213 (47.75) | 1,232 (48.5) |
| 1,350 (53.15) | 1,362 (53.62) | 1,381 (54.37) |
| 1,500 (59.06) | 1,512 (59.53) | 1,531 (60.28) |
| 1,650 (64.96) | 1,662 (65.43) | 1,681 (66.18) |
| 1,800 (70.87) | 1,812 (71.34) | 1,831 (72.09) |
| 1,950 (76.77) | 1,962 (77.24) | 1,981 (77.99) |
| 2,100 (82.68) | 2,112 (83.15) | 2,131 (83.9) |

Recommended accessories

Other models and accessories → www.sick.com/deTec

| | Brief description | Type | Part no. |
|---|--|--------------------------------|----------|
| Connection modules | | | |
|  | IO-Link V1.1 Class A port, USB2.0 port, optional external power supply 24V / 1A | IOLA2US-01101 (SiLink2 Master) | 1061790 |
|  | Connector for connecting an IO-Link master and up to 2 muting sensors to a safety light curtain or a multiple light beam safety device | IO-Link connector | 2092757 |
| Distributors | | | |
|  | Head A: female connector, M12, 5-pin, A-coded Head B: male connector, M12, 5-pin, A-coded 5-pin | DSC-1205T000025KM0 | 6030664 |
|  | Head A: female connector, M12, 8-pin, A-coded Head B: female connector, M12, 8-pin, A-coded 8-pin | DSC-1208T000025KM0 | 6058647 |
| Plug connectors and cables | | | |
|  | Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m | YF2A18-020UA5XLEAX | 2095652 |
| Terminal and alignment brackets | | | |
|  | 4 pieces, FlexFix bracket for 2 devices (e.g. sender and receiver), can be aligned ± 15°, including M5 screw, plastic | BEF-1SHABPKU4 | 2066614 |
|  | 4 pieces, QuickFix bracket for 2 devices (e.g. sender and receiver), plastic | BEF-3SHABPKU4 | 2098710 |
| Safety switching amplifier | | | |
|  | <ul style="list-style-type: none"> • Applications: Output expansion module for OSSDs • Compatible sensor types: Safety sensors with OSSDs • Connection type: Front connector with spring terminals • Restart interlock: no • External device monitoring (EDM): Via path • Outputs: 2 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe) • Housing width: 18 mm | RLY3-OSSD100 | 1085343 |

| | Brief description | Type | Part no. |
|---|--|------------------|----------|
|  | <ul style="list-style-type: none"> • Applications: Output expansion module for OSSDs • Compatible sensor types: Safety sensors with OSSDs • Connection type: Front connector with spring terminals • Restart interlock: no • External device monitoring (EDM): Via path • Outputs: 4 enabling current paths (safe), 1 feedback current path (for use as external device monitoring, not safe), 1 signaling current path (not safe) • Housing width: 28 mm | RLY3-OSSD400 | 1099971 |
| SP1 system plug | | | |
|  | <ul style="list-style-type: none"> • System plug: SP1 • Connection type: Male connector M12, 5-pin • Extension connection: – | 1000 | 2076832 |
|  | <ul style="list-style-type: none"> • System plug: SP1 • Connection type: Male connector M12, 5-pin • Extension connection: Female connector M12, 5-pin | 1100 | 2076833 |
|  | <ul style="list-style-type: none"> • System plug: SP1 • Connection type: Male connector M12, 8-pin • Extension connection: – | 1200 | 2076834 |
|  | <ul style="list-style-type: none"> • System plug: SP1 • Connection type: Male connector M12, 8-pin • Extension connection: Female connector M12, 5-pin | 1300 | 2076835 |
| Sensor Integration Gateway | | | |
|  | <ul style="list-style-type: none"> • Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • Logic editor: yes • Communication interface: IO-Link, USB, Ethernet, PROFINET, REST API • Product category: IO-Link Master | SIG200-0A0412200 | 1089794 |
|  | <ul style="list-style-type: none"> • Description: The SIG200 Sensor Integration Gateway is an IO-Link master with 4 configurable ports through which the IO-Link devices or standard inputs or standard outputs can be connected to a PLC or cloud application using the REST API. • Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • Logic editor: yes • Communication interface: IO-Link, USB, Ethernet, EtherNet/IP™, REST API • Product category: IO-Link Master | SIG200-0A0512200 | 1089796 |
|  | <ul style="list-style-type: none"> • Further functions: Web server integrated, USB connection for easy configuration of the SIG200 Sensor Integration Gateway with SOPAS ET, the engineering tool from SICK, logic editor is available for easy configuration of logic functions • Connection CONFIG: 1 x M8, 4-pin female connector, USB 2.0 (USB-A) • Logic editor: yes • Communication interface: IO-Link, USB, Ethernet, REST API • Product category: IO-Link Master | SIG200-0A0G12200 | 1102605 |

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