



C4P-EA09030A00

deTec

SAFETY LIGHT CURTAINS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
C4P-EA09030A00	1215310

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

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



Detailed technical data

Features

Items supplied	Receiver Test rod with diameter corresponding to the resolution of the safety light curtain Safety instruction Mounting instructions Operating instructions for download
Application	Normal industrial environment
Resolution	30 mm
Protective field height	900 mm
Scanning range	30 m
Response time	11 ms (Uncoded) 17 ms (code 1 or code 2)
No blind zones	Yes
Synchronization	Optical synchronisation

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	9.6×10^{-9}
Cascade with one guest	1.9×10^{-8}
Cascade with two guest devices	2.9×10^{-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	✓
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Automatic calibration of the protective field width	✓
Beam coding	✓
Restart interlock	✓
External device monitoring (EDM)	✓
Cascading	✓

Interfaces

Connection type	Not included (system plug required)
Configuration method	DIP switch on system plug
Display elements	LEDs
Application diagnostic output (ADO)	✓
Fieldbus, industrial network	
Integration via Flexi Soft safety controller	CANopen, DeviceNet™, EtherCAT®, EtherNet/IP™, Modbus TCP, PROFIBUS DP, PROFINET ¹⁾

¹⁾ For additional information on Flexi Soft -> www.sick.com/Flexi_Soft.

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	3.5 W (DC)
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored ¹⁾
ON state, switching voltage HIGH	24 V DC ($V_S - 2.25 \text{ V DC} \dots V_S$)
OFF state, switching voltage LOW	≤ 2 V DC
Current-carrying capacity per OSSD	≤ 500 mA
Diagnostic outputs	
Type of output	PNP semiconductor, short-circuit protected ¹⁾
Output voltage HIGH (active)	≥ $V_S - 3 \text{ V}$
Output voltage LOW (deactivated)	High resistance
Output current HIGH (active)	≤ 100 mA

¹⁾ Applies to the voltage range between -30 V and +30 V.

Mechanical data

Dimensions	See dimensional drawing
Housing material	Aluminum extruded profile

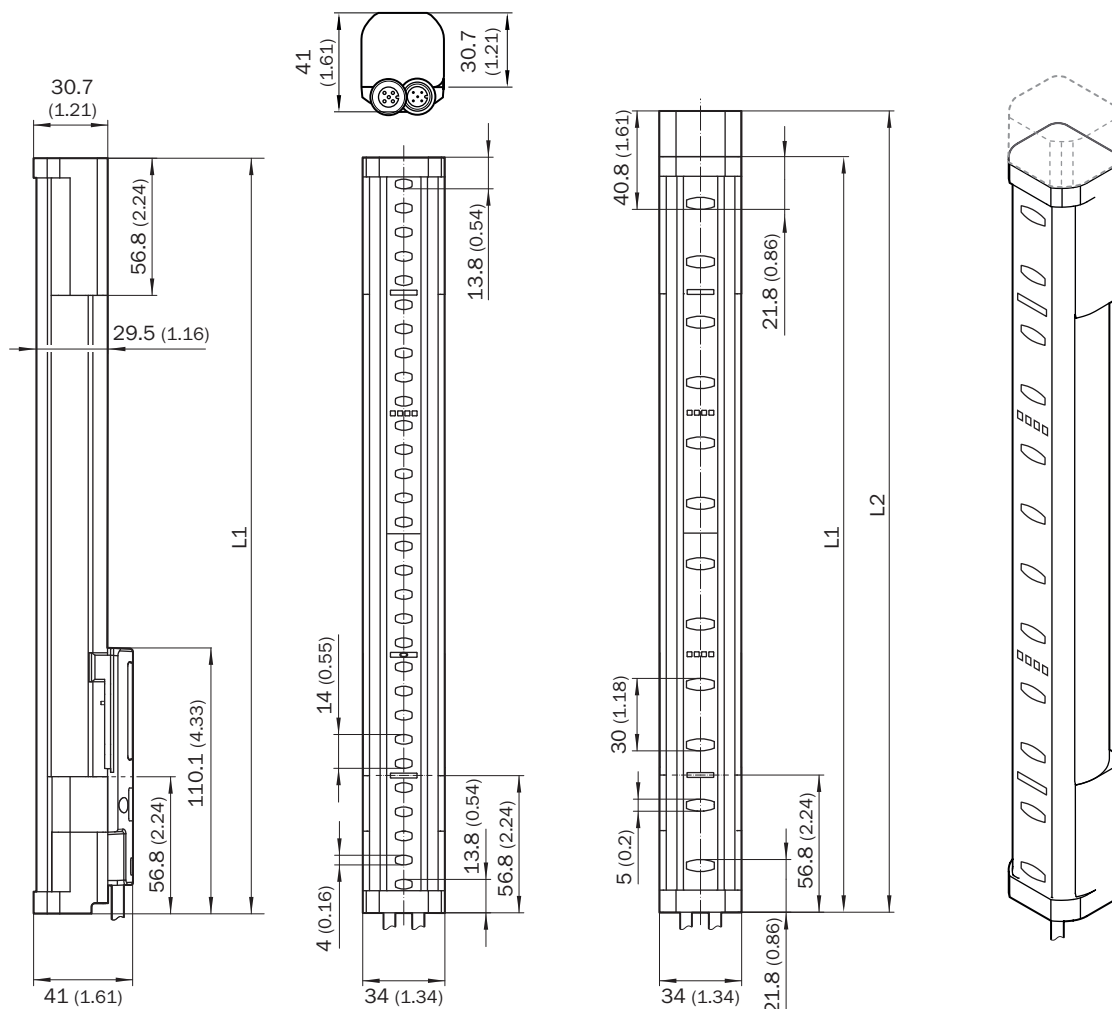
Ambient data

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)

Classifications

ECI@ss 5.0	27272704
ECI@ss 5.1.4	27272704
ECI@ss 6.0	27272704
ECI@ss 6.2	27272704
ECI@ss 7.0	27272704
ECI@ss 8.0	27272704
ECI@ss 8.1	27272704
ECI@ss 9.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	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)

Protective field height	L1	L2
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)
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

	Description	Type	Part no.
Others			
	deTec deTec system plug	1000	2076832
		1100	2076833
		1200	2076834
		1300	2076835

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