



DATA SHEET

# C4C-SG21030A10000

deTec  
Safety light curtains

# SICK

Sensor Intelligence



Illustration may differ

# SAFETY LIGHT CURTAINS

## C4C-SG21030A10000

### ORDERING INFORMATION

| Type              | part no. |
|-------------------|----------|
| C4C-SG21030A10000 | 1221104  |

Further device versions and accessories at [www.sick.com/deTec](http://www.sick.com/deTec)



### DETAILED TECHNICAL DATA

#### FEATURES

|                         |                                                               |
|-------------------------|---------------------------------------------------------------|
| Product version         | deTec4 Core HG                                                |
| Application             | Areas where coolants, lubricants and cleaning agents are used |
| System part             | Sender                                                        |
| Compatible receiver     | 1221105                                                       |
| Resolution              | 30 mm                                                         |
| Scanning range          | 15 m                                                          |
| Protective field height | 2,100 mm                                                      |
| No blind zones          | Yes                                                           |
| Synchronization         | Optical synchronization                                       |
| Items supplied          | Sender                                                        |

#### SAFETY-RELATED PARAMETERS

|                                                                     |                                        |
|---------------------------------------------------------------------|----------------------------------------|
| Type                                                                | Type 4 (IEC 61496-1)                   |
| Safety integrity level                                              | SIL 3 (IEC 61508)                      |
| Category                                                            | Category 4 (ISO 13849-1)               |
| Performance level                                                   | PL e (ISO 13849-1)                     |
| PFH <sub>d</sub> (mean probability of a dangerous failure per hour) | 3.7 x 10 <sup>-9</sup>                 |
| T <sub>m</sub> (mission time)                                       | 20 years (ISO 13849-1)                 |
| Safe state in the event of a fault                                  | At least one OSSD is in the OFF state. |

#### INTERFACES

|                   |                  |
|-------------------|------------------|
| System connection | Plug, M12, 5-pin |
| Length of cable   | 150 mm           |

|                   |                     |                       |
|-------------------|---------------------|-----------------------|
|                   | Cable diameter      | 4.3 mm                |
| Cable bend radius | Stationary position | > 12 x cable diameter |
|                   | Flexible use        | > 15 x cable diameter |
| Display elements  |                     | LEDs                  |

## ELECTRONICS

|                           |                             |
|---------------------------|-----------------------------|
| Protection class          | III (IEC 61140)             |
| Supply voltage $V_s$      | 24 V DC (19.2 V ... 28.8 V) |
| Ripple                    | ≤ 10 %                      |
| Power consumption typical | 1.39 W (DC)                 |

## MECHANICS

|                       |                                    |
|-----------------------|------------------------------------|
| Dimensions            | See dimensional drawing            |
| Housing material      | Aluminum extruded profile          |
| Front screen material | Chemically prestressed float glass |

## AMBIENT DATA

|                               |                                           |
|-------------------------------|-------------------------------------------|
| Enclosure rating              | IP65 (IEC 60529)<br>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 ... 150 Hz, 3,5 mm / 1 g (EN 60068-2-6) |
| Shock resistance              | 15 g / 6 ms (EN 60068-2-27)               |
| Class                         | 3M4 (IEC TR 60721-4-3)                    |

## OTHER INFORMATION

|               |                                |
|---------------|--------------------------------|
| Wave length   | 850 nm                         |
| Type of light | Near-infrared (NIR), invisible |

## CERTIFICATES

|                                                                       |   |
|-----------------------------------------------------------------------|---|
| EU declaration of conformity                                          | ✓ |
| UK declaration of conformity                                          | ✓ |
| ACMA declaration of conformity                                        | ✓ |
| Moroccan declaration of conformity                                    | ✓ |
| China RoHS                                                            | ✓ |
| ULus approval                                                         | ✓ |
| cUL approval                                                          | ✓ |
| Taiwan OSHA certificate                                               | ✓ |
| Japan Press Safety certificate                                        | ✓ |
| EC-Type-Examination approval                                          | ✓ |
| China GB/T certificate                                                | ✓ |
| Information according to Art. 3 of Data Act (Regulation EU 2023/2854) | ✓ |

DIMENSIONAL DRAWING



Dimensions in mm (inch)

| Protective field height | L             |
|-------------------------|---------------|
| 300 (11.81)             | 313 (12.32)   |
| 450 (17.72)             | 463 (18.23)   |
| 600 (23.62)             | 613 (24.13)   |
| 750 (29.53)             | 763 (30.04)   |
| 900 (35.43)             | 913 (35.94)   |
| 1,050 (41.34)           | 1,063 (41.85) |
| 1,200 (47.24)           | 1,213 (47.76) |
| 1,350 (53.15)           | 1,362 (53.62) |
| 1,500 (59.06)           | 1,512 (59.53) |
| 1,650 (64.96)           | 1,662 (65.43) |
| 1,800 (70.87)           | 1,812 (71.34) |
| 1,950 (76.77)           | 1,962 (77.24) |
| 2,100 (82.68)           | 2,112 (83.15) |

Further information as well as suitable accessories, example applications and downloads such as CAD di-  
mensional models, operating instructions and software can be found at [www.sick.com/1221104](http://www.sick.com/1221104)



SICK AG  
WALDKIRCH  
GERMANY  
SICK.COM

# 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

**SICK**  
Sensor Intelligence