



Safety light curtains miniTwin2 as a standalone device or cascade end unit

C2MT-04214BBC03DE0



Model Name > [C2MT-04214BBC03DE0](#)
Part No. > [1207798](#)



At a glance

- Type 2 (IEC 61496), SIL1 (IEC 61508), PL c (EN ISO 13849)
- Compact cross section (15 mm x 32 mm) with no dead zones
- Cascadable twin stick design - sender and receiver in a single housing
- Customized protective field heights in 60-mm increments from 120 mm to 1,200 mm
- Typical scanning ranges 0 m ... 8 m
- Intelligent, software-free configuration of external device monitoring (EDM) and reset function (RES)
- M12, 5-pin device connection

Your benefits

- Cost-effective machine integration: its small design, cascadable features and incremental protective field heights enable a flexible adjustment to the machine design
- Standardization saves time and resources because of more straightforward logistics, order entry and service
- Simplified handling and setup: Software-free, almost fully automatic commissioning and intuitive operation with sustainable optics
- Bright LED display provides fast alignment, easy start up and clear protective field visualization ensure quick diagnostics
- End-to-end coverage in cascadable applications eliminates dead zones and shortens the safety distance, increasing productivity
- Application-specific brackets provide increased flexibility and reduce installation time



Safety-related parameters

Type:	Type 2 (IEC 61496)
Safety integrity level:	SIL1 (IEC 61508) SILCL1 (EN 62061)
Category:	category 2 (EN ISO 13849)
Test rate (internal test):	58 /s
Maximum demand rate:	34 /min (EN ISO 13849) ¹⁾
Performance level:	PL c (EN ISO 13849), Pay attention to optical characteristics! ²⁾
PFHd:	Standalone system: 2.4 * 1E-08 (EN ISO 13849)
TM (mission time):	20 a (EN ISO 13849)
Safe state in the event of a fault:	At least one OSSD is in the OFF state.

1) Between two demands on a safety-related response of the device, at least 100 internal or external tests must be carried out. 2) The performance level does not contain any specific requirements on aspects such as the optical characteristics. For more detailed information on this topic, see page xx.

Functions

Restart interlock:	✓
Restart interlock (delivery status):	Deactivated
External device monitoring (EDM):	✓
External device monitoring (delivery status):	Deactivated
Beam coding:	✓
Automatic beam coding:	✓
Cascaded:	-
Safe SICK device communication via EFI/SDL:	-

Features

Resolution:	14 mm
Protective field height:	420 mm
Scanning range:	0 m ... 6 m
Typical range:	0 m ... 8 m
Response time:	≤ 14 ms ¹⁾
Synchronization:	Optical, without separate synchronization

¹⁾ Standalone devices, no cascaded systems. Other response times see operating instructions.

Mechanical data

Housing cross-section (incl. system connection):	15 mm x 32 mm
Housing material:	Aluminum alloy ALMGSI 0.5
Weight:	155 g

Electrical data

Protection class:	III (EN 61140)
Supply voltage:	24 V DC (19.2 V DC ... 28.8 V DC)
Residual ripple:	≤ 10 % ¹⁾
Power consumption:	≤ 3 A ²⁾
Type of output:	PNP semiconductors, short-circuit protected, cross-circuit monitored ³⁾
Switching voltage HIGH:	24 V DC (VS - 2.25 V DC ... VS)
Switching voltage LOW:	2 V DC
Switching current:	300 mA

¹⁾ Within the limits of V_S ²⁾ Maximum power consumption of a host/guest/guest system with 1,200 mm protective field height and a resolution of 14 mm ³⁾ Applies to the voltage range between -30 V and +30 V

Interfaces

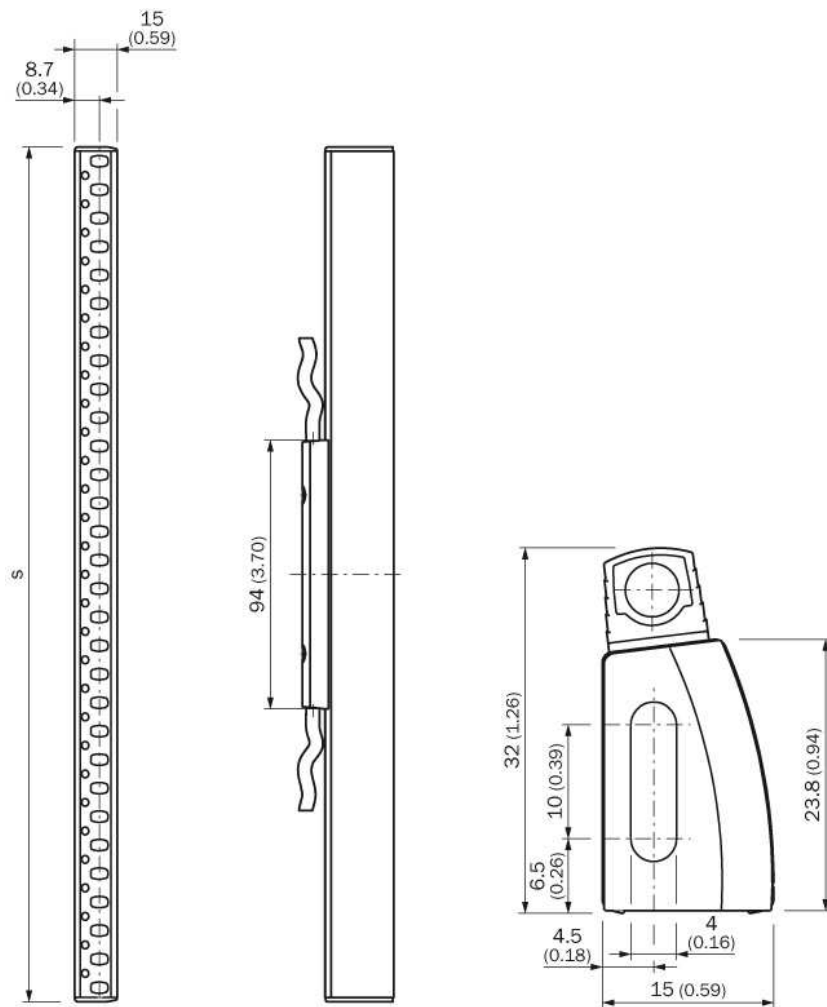
Electrical connection:	Connector M12, 5-pin
Cable length:	350 mm
Conductor cross-section:	0.34 mm ²
Permitted cable length:	≤ 20 m ¹⁾
Configuration method:	Hard wired
Display elements:	LEDs
Integration via Flexi Soft safety controller:	CANopenDeviceNetEtherCATEtherNet/IPModbus TCP PROFIBUS DP PROFINET ²⁾

1) 2) For further information on Flexi Soft, please see sens:Control - safe control solutions product catalog or -> www.sick.com/FlexiSoft

Ambient data

Enclosure rating:	IP 65 (EN 60529)
Ambient operating temperature:	-20 °C ... +55 °C
Storage temperature:	-25 °C ... +70 °C
Air humidity:	15 % ... 95 %, non-condensing
Vibration resistance:	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)
Shock resistance:	10 g, 16 ms (EN 60068-2-27)

Dimensional drawing



Australia

Phone +61 3 9457 0600
1800 33 48 02 – tollfree
E-Mail sales@sick.com.au

Belgium/Luxembourg

Phone +32 (0)2 466 55 66
E-Mail info@sick.be

Brasil

Phone +55 11 3215-4900
E-Mail marketing@sick.com.br

Canada

Phone +1 905 771 14 44
E-Mail information@sick.com

Česká republika

Phone +420 2 57 91 18 50
E-Mail sick@sick.cz

China

Phone +86 4000 121 000
E-Mail info.china@sick.net.cn
Phone +852-2153 6300
E-Mail ghk@sick.com.hk

Danmark

Phone +45 45 82 64 00
E-Mail sick@sick.dk

Deutschland

Phone +49 211 5301-301
E-Mail info@sick.de

España

Phone +34 93 480 31 00
E-Mail info@sick.es

France

Phone +33 1 64 62 35 00
E-Mail info@sick.fr

Great Britain

Phone +44 (0)1727 831121
E-Mail info@sick.co.uk

India

Phone +91-22-4033 8333
E-Mail info@sick-india.com

Israel

Phone +972-4-6881000
E-Mail info@sick-sensors.com

Italia

Phone +39 02 27 43 41
E-Mail info@sick.it

Japan

Phone +81 (0)3 5309 2112
E-Mail support@sick.jp

Magyarország

Phone +36 1 371 2680
E-Mail office@sick.hu

Nederland

Phone +31 (0)30 229 25 44
E-Mail info@sick.nl

Norge

Phone +47 67 81 50 00
E-Mail sick@sick.no

Österreich

Phone +43 (0)22 36 62 28 8-0
E-Mail office@sick.at

Polska

Phone +48 22 837 40 50
E-Mail info@sick.pl

România

Phone +40 356 171 120
E-Mail office@sick.ro

Russia

Phone +7-495-775-05-30
E-Mail info@sick.ru

Schweiz

Phone +41 41 619 29 39
E-Mail contact@sick.ch

Singapore

Phone +65 6744 3732
E-Mail sales.gsg@sick.com

Slovenija

Phone +386 (0)1-47 69 990
E-Mail office@sick.si

South Africa

Phone +27 11 472 3733
E-Mail info@sickautomation.co.za

South Korea

Phone +82 2 786 6321/4
E-Mail info@sickkorea.net

Suomi

Phone +358-9-25 15 800
E-Mail sick@sick.fi

Sverige

Phone +46 10 110 10 00
E-Mail info@sick.se

Taiwan

Phone +886 2 2375-6288
E-Mail sales@sick.com.tw

Türkiye

Phone +90 (216) 528 50 00
E-Mail info@sick.com.tr

United Arab Emirates

Phone +971 (0) 4 88 65 878
E-Mail info@sick.ae

USA/México

Phone +1(952) 941-6780
1 (800) 325-7425 – tollfree
E-Mail info@sickusa.com

More representatives and agencies
at www.sick.com