

### C46E-0901CU400

C4000 Advanced

**SAFETY LIGHT CURTAINS** 



# SICK C 4000 manual part

#### Ordering information

Туре	part no.
C46E-0901CU400	1040186

Other models and accessories → www.sick.com/C4000\_Advanced

Illustration may differ



#### Detailed technical data

#### **Features**

Application	Normal industrial environment
System part	Receiver
Resolution	14 mm
Scanning range	10 m
Protective field height	900 mm
Response time	17 ms <sup>1)</sup>
Synchronization	Optical synchronisation

 $<sup>^{1)}</sup>$  Without beam coding, without blanking, no cascaded systems. Other response times see operating instructions.

#### Safety-related parameters

Canacia panamatara	
Туре	Type 4 (IEC 61496-1)
Safety integrity level	SIL 3 (IEC 61508)
Category	Category 4 (EN ISO 13849)
Performance level	PL e (EN ISO 13849)
$\ensuremath{PFH_D}$ (mean probability of a dangerous failure per hour)	
Cascade with one guest	43 * 10 <sup>-9</sup>
T <sub>M</sub> (mission time)	20 years (EN ISO 13849)

#### **Functions**

	Functions	Delivery status
Protective operation	✓	

 $<sup>^{1)}</sup>$  In conjunction with host device.

Restart interlock	<b>√</b> ¹)	External
External device monitoring (EDM)	1)	
Beam coding	<b>√</b> ¹)	Uncoded
Configurable scanning range	<b>√</b> ¹)	0 m 2.5 m
Reduced resolution	1	Deactivated
Fixed blanking	1	Deactivated
Floating blanking	1	Deactivated
Safe SICK device communication via EFI	1	

<sup>&</sup>lt;sup>1)</sup> In conjunction with host device.

#### Functions in combination with UE402

Bypass	✓
Operating mode switching	✓
PSDI mode	✓

#### Interfaces

System connection	Fixed connection cable 320 mm with male connector M12, 8-pin
Direction of cable connection	Straight
Conductor cross section	0.25 mm <sup>2</sup>
Permitted cable length	3 m $^{1)}$
Configuration method	PC with CDS (Configuration and Diagnostic Software) Via host device
Display elements	7-segment display

<sup>1)</sup> Between host and guest.

#### Electrical data

Protection class	III (IEC 61140)
Supply voltage V <sub>S</sub>	24 V DC (19.2 V 28.8 V) <sup>1)</sup>
Residual ripple	≤ 10 % <sup>2)</sup>

 $<sup>^{1)}</sup>$  Voltage supply via host device.  $^{2)}$  Within the limits of  $\mbox{V}_{\mbox{\scriptsize S}}.$ 

#### Mechanical data

Dimensions	See dimensional drawing
Housing cross-section	48 mm x 40 mm
Housing material	Aluminum extruded profile
Weight	1,990 g

#### Ambient data

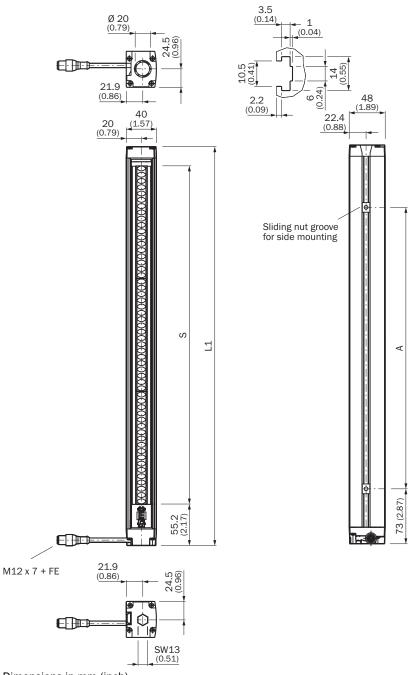
Enclosure rating	IP65 (EN 60529)
Ambient operating temperature	0 °C +55 °C
Storage temperature	-25 °C +70 °C
Air humidity	15 % 95 %, Non-condensing
Vibration resistance	5 g, 10 Hz 55 Hz (EN 60068-2-6)

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Shock resistance	10 g, 16 ms (EN 60068-2-27)
Other information	
Wave length	850 nm
Certificates	
EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China RoHS	✓
ULus approval	✓
cUL approval	✓
EC-Type-Examination approval	✓
China GB certificate	✓
Information according to Art. 3 of Data Act (Regulation EU 2023/2854)	✓
Classifications	

ECLASS 5.0	27272704
ECLASS 5.1.4	27272704
ECLASS 6.0	27272704
ECLASS 6.2	27272704
ECLASS 7.0	27272704
ECLASS 8.0	27272704
ECLASS 8.1	27272704
ECLASS 9.0	27272704
ECLASS 10.0	27272704
ECLASS 11.0	27272704
ECLASS 12.0	27272704
ETIM 5.0	EC002549
<b>ETIM 6.0</b>	EC002549
ETIM 7.0	EC002549
ETIM 8.0	EC002549
UNSPSC 16.0901	46171620

#### **Dimensional drawing**



Dimensions in mm (inch)

illustration sender (receiver mirror image)

Protective field height S	L	A
150	220	76
300	380	224
450	530	374
600	680	524
750	830	674
900	981	825

Protective field height S	L	A
1.050	1.131	975
1.200	1.281	1.125
1.350	1.432	1.275
1.500	1.583	1.427
1.650	1.733	1.504
1.800	1.884	1.728

#### Recommended accessories

Other models and accessories → www.sick.com/C4000\_Advanced

	Brief description	Туре	part no.		
device protection and care					
SICK	<ul> <li>Product family: Cleaning agents</li> <li>Description: Cloth for cleaning optical surfaces</li> </ul>	Lens cloth	4003353		
Mounting sys	tems				
	<ul> <li>Description: Mounting kit 6, side bracket, rotatable</li> <li>Material: Zinc diecast</li> <li>Details: Zinc diecast</li> <li>Packing unit: 4 pieces</li> <li>Suitable for: All protective field heights</li> </ul>	BEF-1SHABAZN4	2019506		
	<ul> <li>Description: Mounting kit 2, rotatable, swivel mount</li> <li>Material: Plastic</li> <li>Details: Polyamide PA6</li> <li>Packing unit: 4 pieces</li> <li>Suitable for: All protective field heights</li> </ul>	BEF-2SMMEAKU4	2019659		
	<ul> <li>Description: Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers</li> <li>Packing unit: 4 pieces</li> <li>Suitable for: All protective field heights</li> </ul>	BEF-3WNGBAST4	7021352		
	<ul> <li>Description: Stainless steel bracket, rotatable</li> <li>Material: Stainless steel</li> <li>Details: Stainless steel 1.4350, stainless steel 1.4301</li> <li>Packing unit: 4 pieces</li> </ul>	BEF-2SMMEAES4	2023708		
9	<ul> <li>Description: Omega bracket, rotatable, fixable with only one screw, for mounting on the swivel mount</li> <li>Packing unit: 4 pieces</li> <li>Suitable for: All protective field heights in large housing</li> </ul>	BEF-2SMMEAAL4	2044847		

	Brief description	Туре	part no.			
Commissionin	Commissioning aids and test equipment					
	<ul> <li>Product: Alignment aids</li> <li>Dimensions (W x H x L): 19 mm</li> <li>67.3 mm</li> <li>66.9 mm</li> <li>Description: Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!</li> </ul>	AR60	1015741			
	<ul> <li>Product: Alignment aids</li> <li>Description: Adapter AR60 for housing cross-section 48 mm x 40 mm</li> </ul>	AR60 adapter, 48x40	4032461			
	Product: Alignment aids     Description: Adapter AR60 for housing cross-section 48 mm x 40 mm in PU3H device column	AR60 adapter, 48x40, PU3H	4056731			
connectors an	nd cables					
680	<ul> <li>Connection type head A: Male connector, M8, 4-pin, straight</li> <li>Connection type head B: Male connector, USB-A, straight</li> <li>Cable: 2 m, 4-wire, PVC</li> <li>Description: Unshielded</li> </ul>	DSL-8U04G02M025KM:	6034574			
1	<ul> <li>Connection type head A: Male connector, M8, 4-pin, straight</li> <li>Connection type head B: Male connector, USB-A, straight</li> <li>Cable: 10 m, 4-wire, PVC</li> <li>Description: Unshielded</li> </ul>	DSL-8U04G10M025KM1	6034575			
66	<ul> <li>Connection type head A: Female connector, M12, 8-pin, straight</li> <li>Connection type head B: Male connector, M12, 8-pin, straight</li> <li>Signal type: Sensor/actuator cable</li> <li>Cable: 1 m, 7-wire, PUR, halogen-free</li> <li>Description: Sensor/actuator cable, shielded</li> </ul>	DSL-127SG01ME25KM(	2076628			
system plugs a	and extension modules					
1911 ES	<ul> <li>Applications: Functionality upgrade</li> <li>Description: Upgrades the C4000 Standard, Advanced, Palletizer, Entry/Exit, and Fusion to include the functions defined in the technical specifications, e.g., bypass, operating mode switching, and PSDI in the case of C4000 Standard, Advanced.</li> <li>Compatible sensor types: C4000 safety light curtains</li> </ul>	UE402	1023577			

#### 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

