



# C46E-1301CT400

C4000 Standard

SAFETY LIGHT CURTAINS

**SICK**  
Sensor Intelligence.



Illustration may differ

### Ordering information

Type	part no.
C46E-1301CT400	1040180

Other models and accessories → [www.sick.com/C4000\\_Standard](http://www.sick.com/C4000_Standard)

### Detailed technical data

#### Features

<b>Application</b>	Normal industrial environment
<b>System part</b>	Receiver
<b>Resolution</b>	14 mm
<b>Scanning range</b>	10 m
<b>Protective field height</b>	1,350 mm
<b>Response time</b>	22 ms <sup>1)</sup>
<b>Synchronization</b>	Optical synchronisation

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

#### Safety-related parameters

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

#### Functions

	Functions	Delivery status
<b>Protective operation</b>	✓	
<b>Restart interlock</b>	✓ <sup>1)</sup>	External
<b>External device monitoring (EDM)</b>	<sup>1)</sup>	Deactivated
<b>Beam coding</b>	✓ <sup>1)</sup>	Uncoded
<b>Configurable scanning range</b>	✓ <sup>1)</sup>	0 m ... 2.5 m

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

<b>Safe SICK device communication via EFI</b>	✓
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<sup>1)</sup> In conjunction with host device.

#### Functions in combination with UE402

<b>Bypass</b>	✓
<b>Operating mode switching</b>	✓
<b>PSDI mode</b>	✓

#### Interfaces

<b>System connection</b>	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 <sup>1)</sup>
<b>Configuration method</b>	PC with CDS (Configuration and Diagnostic Software) Via host device
<b>Display elements</b>	7-segment display

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

#### Electrical data

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

<sup>1)</sup> Voltage supply via host device.

<sup>2)</sup> Within the limits of V<sub>S</sub>.

#### Mechanical data

<b>Dimensions</b>	See dimensional drawing
<b>Housing cross-section</b>	48 mm x 40 mm
<b>Housing material</b>	Aluminum extruded profile
<b>Weight</b>	2,850 g

#### Ambient data

<b>Enclosure rating</b>	IP65 (EN 60529)
<b>Ambient operating temperature</b>	0 °C ... +55 °C
<b>Storage temperature</b>	-25 °C ... +70 °C
<b>Air humidity</b>	15 % ... 95 %, Non-condensing
<b>Vibration resistance</b>	5 g, 10 Hz ... 55 Hz (EN 60068-2-6)
<b>Shock resistance</b>	10 g, 16 ms (EN 60068-2-27)

#### Other information

<b>Wave length</b>	850 nm
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#### Classifications

<b>ECLASS 5.0</b>	27272704
<b>ECLASS 5.1.4</b>	27272704
<b>ECLASS 6.0</b>	27272704
<b>ECLASS 6.2</b>	27272704

<b>ECLASS 7.0</b>	27272704
<b>ECLASS 8.0</b>	27272704
<b>ECLASS 8.1</b>	27272704
<b>ECLASS 9.0</b>	27272704
<b>ECLASS 10.0</b>	27272704
<b>ECLASS 11.0</b>	27272704
<b>ECLASS 12.0</b>	27272704
<b>ETIM 5.0</b>	EC002549
<b>ETIM 6.0</b>	EC002549
<b>ETIM 7.0</b>	EC002549
<b>ETIM 8.0</b>	EC002549
<b>UNSPSC 16.0901</b>	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\\_Standard](http://www.sick.com/C4000_Standard)

	Brief description	Type	part no.
device protection and care			
	<ul style="list-style-type: none"> <li><b>Product family:</b> Cleaning agents</li> <li><b>Description:</b> Cloth for cleaning optical surfaces</li> </ul>	Lens cloth	4003353
Mounting systems			
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 6, side bracket, rotatable</li> <li><b>Material:</b> Zinc diecast</li> <li><b>Details:</b> Zinc diecast</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>	BEF-1SHABAZN4	2019506
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 2, rotatable, swivel mount</li> <li><b>Material:</b> Plastic</li> <li><b>Details:</b> Polyamide PA6</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>	BEF-2SMMEAKU4	2019659
	<ul style="list-style-type: none"> <li><b>Description:</b> Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights</li> </ul>	BEF-3WNGBAST4	7021352
	<ul style="list-style-type: none"> <li><b>Description:</b> Omega bracket, rotatable, fixable with only one screw, for mounting on the swivel mount</li> <li><b>Packing unit:</b> 4 pieces</li> <li><b>Suitable for:</b> All protective field heights in large housing</li> </ul>	BEF-2SMMEAL4	2044847

	Brief description	Type	part no.
Commissioning aids and test equipment			
	<ul style="list-style-type: none"> <li><b>Product:</b> Alignment aids</li> <li><b>Dimensions (W x H x L):</b> 19 mm 67.3 mm 66.9 mm</li> <li><b>Description:</b> Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!</li> </ul>	AR60	1015741
	<ul style="list-style-type: none"> <li><b>Product:</b> Alignment aids</li> <li><b>Description:</b> Adapter AR60 for housing cross-section 48 mm x 40 mm</li> </ul>	AR60 adapter, 48x40	4032461
	<ul style="list-style-type: none"> <li><b>Product:</b> Alignment aids</li> <li><b>Description:</b> Adapter AR60 for housing cross-section 48 mm x 40 mm in PU3H device column</li> </ul>	AR60 adapter, 48x40, PU3H	4056731
connectors and cables			
	<ul style="list-style-type: none"> <li><b>Description:</b> Unshielded</li> <li><b>Connection type head A:</b> Male connector, M8, 4-pin, straight</li> <li><b>Connection type head B:</b> Male connector, USB-A, straight</li> <li><b>Cable:</b> 2 m, 4-wire, PVC</li> </ul>	DSL-8U04G02M025KM:	6034574
	<ul style="list-style-type: none"> <li><b>Description:</b> Unshielded</li> <li><b>Connection type head A:</b> Male connector, M8, 4-pin, straight</li> <li><b>Connection type head B:</b> Male connector, USB-A, straight</li> <li><b>Cable:</b> 10 m, 4-wire, PVC</li> </ul>	DSL-8U04G10M025KM:	6034575
	<ul style="list-style-type: none"> <li><b>Description:</b> Sensor/actuator cable, shielded</li> <li><b>Connection type head A:</b> Female connector, M12, 8-pin, straight</li> <li><b>Connection type head B:</b> Male connector, M12, 8-pin, straight</li> <li><b>Signal type:</b> Sensor/actuator cable</li> <li><b>Cable:</b> 1 m, 7-wire, PUR, halogen-free</li> </ul>	DSL-127SG01ME25KM:	2076628
system plugs and extension modules			
	<ul style="list-style-type: none"> <li><b>Applications:</b> Functionality upgrade</li> <li><b>Compatible sensor types:</b> 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](http://www.sick.com)