



C4000 Advanced

Increase productivity with greater machine safety

SICK
Sensor Intelligence.



Technical data overview

Safety level	PL e, SIL 3, Type 4
Resolution	14 mm ... 40 mm (depends on variant)
Scanning range	10 m / 21 m (depends on variant)
Protective field height	150 mm ... 1,800 mm (depends on variant)
Enclosure rating	IP65
Ambient operating temperature	0 °C ... +55 °C

Product description

The C4000 Advanced safety light curtain reliably protects against access into hazardous points and areas. Integrated blanking functions allow objects (such as cables or work tables), but not people, to enter the protective field. Cascading several systems offers the user a high degree of flexibility for the application solution. The restart interlock (RES) and external device monitoring (EDM) functions provide easy machine integration. Various mounting adapters and innovative accessories enable flexible installation. The industry-tested 7-segment display saves time during alignment and diagnostics. The C4000 Advanced, which provides protective field heights from 300 mm to 1,800 mm, offers reliable machine protection up to the highest protection level, PL e.

At a glance

- Type 4 (IEC 61496), SIL3 (IEC 61508), PL e (EN ISO 13849)
- Various options for blanking objects: fixed, floating, or teach-in
- 7-segment display
- PSDI mode with the UE402 switching amplifier
- External device monitoring (EDM) and restart interlock (RES)
- Beam coding for correct system allocation
- Configuration and diagnostics via PC
- Cascade up to three systems

Your benefits

- Blanking functions enable reliable and safe object detection and thus increase productivity
- Time-saving alignment and diagnostics by means of 7-segment display
- Beam coding protects the systems against mutual interference and thus offers a high level of availability
- The clone plug can duplicate configurations quickly and easily, thus saving time and money
- Increased flexibility and reduced wiring complexity via cascading of up to a maximum of three systems
- Convenient configuration and diagnostics ensure increased availability

Fields of application

- Automotive engineering and vehicle construction
- Shaping machine tools
- Plastics and rubber industry
- Electronics industry
- Robotics industry
- Printing and paper industry
- Wood industry
- Palletizer systems

Ordering information

Other models and accessories → www.sick.com/C4000_Advanced

- **System connection:** male connector M12, 8-pin

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
14 mm	10 m	150 mm	C46S-0101CT400	1028796	C46E-0101CU400	1028820
			C46S-0101CT500	1028810	C46E-0101CU500	1028825
		300 mm	C46S-0301CT400	1028802	C46E-0301CU400	1028821
			C46S-0301CT500	1028812	C46E-0301CU500	1028826
		450 mm	C46S-0401CT400	1028804	C46E-0401CU400	1028822
			C46S-0401CT500	1028814	C46E-0401CU500	1028827
		600 mm	C46S-0601CT400	1028806	C46E-0601CU400	1028823
			C46S-0601CT500	1028816	C46E-0601CU500	1028828
		750 mm	C46S-0701CT400	1028808	C46E-0701CU400	1028824
			C46S-0701CT500	1028818	C46E-0701CU500	1028829
		900 mm	C46S-0901CT400	1040173	C46E-0901CU400	1040186
		1,050 mm	C46S-1001CT400	1040175	C46E-1001CU400	1040187
		1,200 mm	C46S-1201CT400	1040177	C46E-1201CU400	1040188
		1,350 mm	C46S-1301CT400	1040179	C46E-1301CU400	1040189
		1,500 mm	C46S-1501CT400	1040181	C46E-1501CU400	1040190
		1,650 mm	C46S-1601CT400	1040182	C46E-1601CU400	1040191
		1,800 mm	C46S-1801CT400	1040184	C46E-1801CU400	1040192
30 mm	21 m	150 mm	C46S-0103CT400	1028879	C46E-0103CU400	1028889
			C46S-0103CT500	1028901	C46E-0103CU500	1028894
		300 mm	C46S-0303CT400	1028881	C46E-0303CU400	1028890
			C46S-0303CT500	1028903	C46E-0303CU500	1028895
		450 mm	C46S-0403CT400	1028883	C46E-0403CU400	1028891
			C46S-0403CT500	1028905	C46E-0403CU500	1028896
		600 mm	C46S-0603CT400	1028885	C46E-0603CU400	1028892
			C46S-0603CT500	1028907	C46E-0603CU500	1028897
		750 mm	C46S-0703CT400	1028887	C46E-0703CU400	1028893
			C46S-0703CT500	1028909	C46E-0703CU500	1028898
		900 mm	C46S-0903CT400	1040193	C46E-0903CU400	1040207
		1,050 mm	C46S-1003CT400	1040195	C46E-1003CU400	1040208
		1,200 mm	C46S-1203CT400	1040197	C46E-1203CU400	1040209
		1,350 mm	C46S-1303CT400	1040199	C46E-1303CU400	1040210
		1,500 mm	C46S-1503CT400	1040201	C46E-1503CU400	1040211
		1,650 mm	C46S-1603CT400	1040203	C46E-1603CU400	1040212
		1,800 mm	C46S-1803CT400	1040205	C46E-1803CU400	1040213

C4000 Advanced without extension connection

- **System connection:** Hirschmann male connector M26, 12-pin

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
14 mm	10 m	300 mm	C40S-0301CA010	1018591	C40E-0301CB010	1018781
		450 mm	C40S-0401CA010	1018347	C40E-0401CB010	1018782
		600 mm	C40S-0601CA010	1018593	C40E-0601CB010	1018783
		750 mm	C40S-0701CA010	1018595	C40E-0701CB010	1018784
		900 mm	C40S-0901CA010	1018597	C40E-0901CB010	1018785
		1,050 mm	C40S-1001CA010	1018599	C40E-1001CB010	1018786
		1,200 mm	C40S-1201CA010	1018601	C40E-1201CB010	1018787
		1,350 mm	C40S-1301CA010	1018603	C40E-1301CB010	1018788
		1,500 mm	C40S-1501CA010	1018605	C40E-1501CB010	1018789
		1,650 mm	C40S-1601CA010	1018607	C40E-1601CB010	1018790
		1,800 mm	C40S-1801CA010	1018609	C40E-1801CB010	1018791
20 mm	21 m	300 mm	C40S-0302CA010	1018613	C40E-0302CB010	1018792
		450 mm	C40S-0402CA010	1018615	C40E-0402CB010	1018793
		600 mm	C40S-0602CA010	1018617	C40E-0602CB010	1018794
	21 m	750 mm	C40S-0702CA010	1018619	C40E-0702CB010	1018795
		900 mm	C40S-0902CA010	1018621	C40E-0902CB010	1018796
		1,050 mm	C40S-1002CA010	1018623	C40E-1002CB010	1018797
		1,200 mm	C40S-1202CA010	1018625	C40E-1202CB010	1018798
		1,350 mm	C40S-1302CA010	1018627	C40E-1302CB010	1018799
		1,500 mm	C40S-1502CA010	1018629	C40E-1502CB010	1018800
		1,650 mm	C40S-1602CA010	1018631	C40E-1602CB010	1018801
		1,800 mm	C40S-1802CA010	1018633	C40E-1802CB010	1018802
30 mm	21 m	300 mm	C40S-0303CA010	1018635	C40E-0303CB010	1018803
		450 mm	C40S-0403CA010	1018637	C40E-0403CB010	1018804
		600 mm	C40S-0603CA010	1018639	C40E-0603CB010	1018805
		750 mm	C40S-0703CA010	1018641	C40E-0703CB010	1018806
		900 mm	C40S-0903CA010	1018643	C40E-0903CB010	1018807
		1,050 mm	C40S-1003CA010	1018645	C40E-1003CB010	1018809
		1,200 mm	C40S-1203CA010	1018647	C40E-1203CB010	1018810
		1,350 mm	C40S-1303CA010	1018649	C40E-1303CB010	1018811
		1,500 mm	C40S-1503CA010	1018651	C40E-1503CB010	1018812
		1,650 mm	C40S-1603CA010	1018653	C40E-1603CB010	1018813
		1,800 mm	C40S-1803CA010	1018655	C40E-1803CB010	1018814

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
40 mm	21 m	300 mm	C40S-0304CA010	1018657	C40E-0304CB010	1018815
		450 mm	C40S-0404CA010	1018659	C40E-0404CB010	1018816
		600 mm	C40S-0604CA010	1018661	C40E-0604CB010	1018817
		750 mm	C40S-0704CA010	1018663	C40E-0704CB010	1018818
		900 mm	C40S-0904CA010	1018665	C40E-0904CB010	1018819
		1,050 mm	C40S-1004CA010	1018667	C40E-1004CB010	1018820
		1,200 mm	C40S-1204CA010	1018669	C40E-1204CB010	1018821
		1,350 mm	C40S-1304CA010	1018671	C40E-1304CB010	1018822
		1,500 mm	C40S-1504CA010	1018673	C40E-1504CB010	1018823
		1,650 mm	C40S-1604CA010	1018675	C40E-1604CB010	1018824
		1,800 mm	C40S-1804CA010	1018677	C40E-1804CB010	1018825

- **System connection:** Hirschmann male connector M26, 12-pin
- **Extension connection:** Hirschmann female connector M26, 12 pin

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
14 mm	10 m	300 mm	C40S-0301CA010	1018591	C40E-0301DB010	1018827
		450 mm	C40S-0401CA010	1018347	C40E-0401DB010	1018828
		600 mm	C40S-0601CA010	1018593	C40E-0601DB010	1018829
		750 mm	C40S-0701CA010	1018595	C40E-0701DB010	1018830
		900 mm	C40S-0901CA010	1018597	C40E-0901DB010	1018831
		1,050 mm	C40S-1001CA010	1018599	C40E-1001DB010	1018832
		1,200 mm	C40S-1201CA010	1018601	C40E-1201DB010	1018833
		1,350 mm	C40S-1301CA010	1018603	C40E-1301DB010	1018834
		1,500 mm	C40S-1501CA010	1018605	C40E-1501DB010	1018835
		1,650 mm	C40S-1601CA010	1018607	C40E-1601DB010	1018836
		1,800 mm	C40S-1801CA010	1018609	C40E-1801DB010	1018837
20 mm	21 m	300 mm	C40S-0302CA010	1018613	C40E-0302DB010	1018838
		450 mm	C40S-0402CA010	1018615	C40E-0402DB010	1018839
		600 mm	C40S-0602CA010	1018617	C40E-0602DB010	1018840
	21 m	750 mm	C40S-0702CA010	1018619	C40E-0702DB010	1018841
		900 mm	C40S-0902CA010	1018621	C40E-0902DB010	1018842
		1,050 mm	C40S-1002CA010	1018623	C40E-1002DB010	1018843
		1,200 mm	C40S-1202CA010	1018625	C40E-1202DB010	1018844
		1,350 mm	C40S-1302CA010	1018627	C40E-1302DB010	1018845
		1,500 mm	C40S-1502CA010	1018629	C40E-1502DB010	1018846
		1,650 mm	C40S-1602CA010	1018631	C40E-1602DB010	1018847
		1,800 mm	C40S-1802CA010	1018633	C40E-1802DB010	1018848

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
30 mm	21 m	300 mm	C40S-0303CA010	1018635	C40E-0303DB010	1018849
		450 mm	C40S-0403CA010	1018637	C40E-0403DB010	1018850
		600 mm	C40S-0603CA010	1018639	C40E-0603DB010	1018851
		750 mm	C40S-0703CA010	1018641	C40E-0703DB010	1018852
		900 mm	C40S-0903CA010	1018643	C40E-0903DB010	1018853
		1,050 mm	C40S-1003CA010	1018645	C40E-1003DB010	1018854
		1,200 mm	C40S-1203CA010	1018647	C40E-1203DB010	1018855
		1,350 mm	C40S-1303CA010	1018649	C40E-1303DB010	1018856
		1,500 mm	C40S-1503CA010	1018651	C40E-1503DB010	1018857
		1,650 mm	C40S-1603CA010	1018653	C40E-1603DB010	1018858
		1,800 mm	C40S-1803CA010	1018655	C40E-1803DB010	1018859
40 mm	21 m	300 mm	C40S-0304CA010	1018657	C40E-0304DB010	1018860
		450 mm	C40S-0404CA010	1018659	C40E-0404DB010	1018861
		600 mm	C40S-0604CA010	1018661	C40E-0604DB010	1018862
		750 mm	C40S-0704CA010	1018663	C40E-0704DB010	1018863
		900 mm	C40S-0904CA010	1018665	C40E-0904DB010	1018864
		1,050 mm	C40S-1004CA010	1018667	C40E-1004DB010	1018865
		1,200 mm	C40S-1204CA010	1018669	C40E-1204DB010	1018866
		1,350 mm	C40S-1304CA010	1018671	C40E-1304DB010	1018867
		1,500 mm	C40S-1504CA010	1018673	C40E-1504DB010	1018868
		1,650 mm	C40S-1604CA010	1018675	C40E-1604DB010	1018869
		1,800 mm	C40S-1804CA010	1018677	C40E-1804DB010	1018870

C4000 Advanced with extension connection M26, 12-pin

- **System connection:** Hirschmann male connector M26, 12-pin
- **Extension connection:** Hirschmann female connector M26, 12 pin

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
14 mm	10 m	300 mm	C40S-0301DA010	1018690	C40E-0301DB010	1018827
		450 mm	C40S-0401DA010	1018349	C40E-0401DB010	1018828
		600 mm	C40S-0601DA010	1018692	C40E-0601DB010	1018829
		750 mm	C40S-0701DA010	1018694	C40E-0701DB010	1018830
		900 mm	C40S-0901DA010	1018696	C40E-0901DB010	1018831
		1,050 mm	C40S-1001DA010	1018698	C40E-1001DB010	1018832
		1,200 mm	C40S-1201DA010	1018700	C40E-1201DB010	1018833
		1,350 mm	C40S-1301DA010	1018702	C40E-1301DB010	1018834
		1,500 mm	C40S-1501DA010	1018704	C40E-1501DB010	1018835
		1,650 mm	C40S-1601DA010	1018706	C40E-1601DB010	1018836
		1,800 mm	C40S-1801DA010	1018708	C40E-1801DB010	1018837

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
20 mm	21 m	300 mm	C40S-0302DA010	1018710	C40E-0302DB010	1018838
		450 mm	C40S-0402DA010	1018712	C40E-0402DB010	1018839
		600 mm	C40S-0602DA010	1018714	C40E-0602DB010	1018840
	21 m	750 mm	C40S-0702DA010	1018716	C40E-0702DB010	1018841
		900 mm	C40S-0902DA010	1018718	C40E-0902DB010	1018842
		1,050 mm	C40S-1002DA010	1018720	C40E-1002DB010	1018843
		1,200 mm	C40S-1202DA010	1018722	C40E-1202DB010	1018844
		1,350 mm	C40S-1302DA010	1018724	C40E-1302DB010	1018845
		1,500 mm	C40S-1502DA010	1018726	C40E-1502DB010	1018846
		1,650 mm	C40S-1602DA010	1018728	C40E-1602DB010	1018847
		1,800 mm	C40S-1802DA010	1018730	C40E-1802DB010	1018848
30 mm	21 m	300 mm	C40S-0303DA010	1018733	C40E-0303DB010	1018849
		450 mm	C40S-0403DA010	1018735	C40E-0403DB010	1018850
		600 mm	C40S-0603DA010	1018737	C40E-0603DB010	1018851
		750 mm	C40S-0703DA010	1018739	C40E-0703DB010	1018852
		900 mm	C40S-0903DA010	1018741	C40E-0903DB010	1018853
		1,050 mm	C40S-1003DA010	1018743	C40E-1003DB010	1018854
		1,200 mm	C40S-1203DA010	1018745	C40E-1203DB010	1018855
		1,350 mm	C40S-1303DA010	1018747	C40E-1303DB010	1018856
		1,500 mm	C40S-1503DA010	1018749	C40E-1503DB010	1018857
		1,650 mm	C40S-1603DA010	1018751	C40E-1603DB010	1018858
		1,800 mm	C40S-1803DA010	1018753	C40E-1803DB010	1018859
40 mm	21 m	300 mm	C40S-0304DA010	1018755	C40E-0304DB010	1018860
		450 mm	C40S-0404DA010	1018757	C40E-0404DB010	1018861
		600 mm	C40S-0604DA010	1018759	C40E-0604DB010	1018862
		750 mm	C40S-0704DA010	1018762	C40E-0704DB010	1018863
		900 mm	C40S-0904DA010	1018765	C40E-0904DB010	1018864
		1,050 mm	C40S-1004DA010	1018767	C40E-1004DB010	1018865
		1,200 mm	C40S-1204DA010	1018769	C40E-1204DB010	1018866
		1,350 mm	C40S-1304DA010	1018771	C40E-1304DB010	1018867
		1,500 mm	C40S-1504DA010	1018773	C40E-1504DB010	1018868
		1,650 mm	C40S-1604DA010	1018775	C40E-1604DB010	1018869
		1,800 mm	C40S-1804DA010	1018777	C40E-1804DB010	1018870

C4000 Advanced Host with extension connection M12, 8-pin

- **System connection:** Hirschmann male connector M26, 12-pin
- **Extension connection:** female connector M12, 8-pin

Resolution	Scanning range	Protective field height	Sender		Receiver	
			Type	Part no.	Type	Part no.
14 mm	10 m	300 mm	C40S-0301DA040	1028969	C40E-0301DB040	1028989
		450 mm	C40S-0401DA040	1028967	C40E-0401DB040	1028990
		600 mm	C40S-0601DA040	1028971	C40E-0601DB040	1028991
		750 mm	C40S-0701DA040	1028973	C40E-0701DB040	1028992
		900 mm	C40S-0901DA040	1028975	C40E-0901DB040	1028993
		1,050 mm	C40S-1001DA040	1028977	C40E-1001DB040	1028994
		1,200 mm	C40S-1201DA040	1028979	C40E-1201DB040	1028995
		1,350 mm	C40S-1301DA040	1028981	C40E-1301DB040	1028996
		1,500 mm	C40S-1501DA040	1028983	C40E-1501DB040	1028997
		1,650 mm	C40S-1601DA040	1028985	C40E-1601DB040	1028998
		1,800 mm	C40S-1801DA040	1028987	C40E-1801DB040	1028999
30 mm	21 m	300 mm	C40S-0303DA040	1029001	C40E-0303DB040	1029023
		450 mm	C40S-0403DA040	1029003	C40E-0403DB040	1029024
		600 mm	C40S-0603DA040	1029005	C40E-0603DB040	1029025
		750 mm	C40S-0703DA040	1029007	C40E-0703DB040	1029026
		900 mm	C40S-0903DA040	1029009	C40E-0903DB040	1029027
		1,050 mm	C40S-1003DA040	1029011	C40E-1003DB040	1029028
		1,200 mm	C40S-1203DA040	1029013	C40E-1203DB040	1029029
		1,350 mm	C40S-1303DA040	1029015	C40E-1303DB040	1029030
		1,500 mm	C40S-1503DA040	1029017	C40E-1503DB040	1029031
		1,650 mm	C40S-1603DA040	1029019	C40E-1603DB040	1029032
		1,800 mm	C40S-1803DA040	1029021	C40E-1803DB040	1029033

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.”

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