



C40S-1503AA300, C40E-1503AG300

C4000 Basic Plus

SAFETY LIGHT CURTAINS

SICK
Sensor Intelligence.



Ordering information

System part	Type	Part no.
Sender	C40S-1503AA300	1027941
Receiver	C40E-1503AG300	1027963

There are several successor products for this product with different functional scopes. When selecting the successor product, please consider its corresponding functional scope. Adapter kits are available for easy replacement.

Other models and accessories → www.sick.com/C4000_Basic_Plus

Illustration may differ



Detailed technical data

Features

System part	Pair
Resolution	30 mm
Scanning range	6 m
Protective field height	1,500 mm
Synchronization	Optical synchronisation

Safety-related parameters

Type	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)
PFH_D (mean probability of a dangerous failure per hour)	$15 * 10^{-9}$ (EN ISO 13849)
T_M (mission time)	20 years (EN ISO 13849)
Safe state in the event of a fault	At least one OSSD is in the OFF state.

Functions

	Functions	Delivery status
Protective operation	✓	
Restart interlock	✓	Deactivated
External device monitoring (EDM)	✓	Deactivated














Interfaces

System connection	Male connector M12, 8-pin
Direction of cable connection	Straight
Conductor cross section	0.25 mm ²
Permitted cable length	≤ 15 m
Configuration method	Hard wired

Display elements	7-segment display
Electrical data	
Protection class	III (IEC 61140)
Supply voltage V_S	24 V DC (19.2 V ... 28.8 V) ¹⁾
Residual ripple	≤ 10 % ²⁾
Output signal switching devices (OSSDs)	
Type of output	2 PNP semiconductors, short-circuit protected, cross-circuit monitored
ON state, switching voltage HIGH	24 V DC (15 V DC ... 28.8 V DC)
OFF state, switching voltage LOW	2 V DC
Current-carrying capacity per OSSD	≤ 500 mA
¹⁾ The external voltage supply must be capable of buffering brief mains voltage failures of 20 ms as specified in EN 60204-1. Suitable power supplies are available as accessories from SICK. ²⁾ Within the limits of V_S .	
Mechanical data	
Dimensions	See dimensional drawing
Housing cross-section	48 mm x 40 mm
Housing material	Aluminum extruded profile
Weight	3,140 g / 3,110 g (depending on type)
Ambient data	
Enclosure rating	IP65 (IEC 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)
Shock resistance	10 g, 16 ms (EN 60068-2-27)
Other information	
Wave length	850 nm
Classifications	
eCl@ss 5.0	27272704
eCl@ss 5.1.4	27272704
eCl@ss 6.0	27272704
eCl@ss 6.2	27272704
eCl@ss 7.0	27272704
eCl@ss 8.0	27272704
eCl@ss 8.1	27272704
eCl@ss 9.0	27272704
eCl@ss 10.0	27272704
eCl@ss 11.0	27272704
eCl@ss 12.0	27272704
ETIM 5.0	EC002549
ETIM 6.0	EC002549

Recommended accessories

Other models and accessories → www.sick.com/C4000_Basic_Plus

	Brief description	Type	Part no.
Alignment aids			
	Laser alignment aid for various sensors, laser class 2 (IEC 60825). Do not look into the beam!, 19 mm x 67.3 mm x 66.9 mm	AR60	1015741
	Adapter AR60 for housing cross-section 48 mm x 40 mm	AR60 adapter, 48x40	4032461
	Adapter AR60 for housing cross-section 48 mm x 40 mm in PU3H device column	AR60 adapter, 48x40, PU3H	4056731
Optics cloths			
	Cloth for cleaning optical surfaces	Lens cloth	4003353
Test and monitoring tools			
	30 mm diameter, 250 mm length	Test rod 30 mm	2022602
Mounting brackets and plates			
	4 pieces, Mounting kit 1, mounting bracket, rigid, L-shaped, including fixing screws and washers	BEF-3WNGBAST4	7021352
Plug connectors and cables			
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: PUR, halogen-free, shielded, 5 m	DOL-127SG05ME25KM0	6020354
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 5 m	DOL-127SG05ME25KM0	2076541
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: PUR, halogen-free, shielded, 10 m	DOL-127SG10ME25KM0	6020352
	Head A: female connector, M12, 8-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 10 m	DOL-127SG10ME25KM0	2076543
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: PUR, halogen-free, shielded, 15 m	DOL-127SG15ME25KM0	6020872
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 15 m	DOL-127SG15ME25KM0	2076544
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: PUR, halogen-free, shielded, 2.5 m	DOL-127SG2M5E25KM0	6020537

	Brief description	Type	Part no.
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 2.5 m	DOL-127SG2M5E25KM0	2076540
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: PUR, halogen-free, shielded, 7.5 m	DOL-127SG7M5E25KM0	6020353
	Head A: female connector, M12, 8-pin, straight Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 7.5 m	DOL-127SG7M5E25KM0	2076542
	Head A: female connector, M12, 8-pin, angled Head B: Flying leads Cable: PUR, halogen-free, shielded, 5 m	DOL-127SW05ME25KM0	6021342
	Head A: female connector, M12, 8-pin, angled Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 5 m	DOL-127SW05ME25KM0	2076548
	Head A: female connector, M12, 8-pin, angled Head B: Flying leads Cable: PUR, halogen-free, shielded, 15 m	DOL-127SW15ME25KM0	6021343
	Head A: female connector, M12, 8-pin, angled Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 15 m	DOL-127SW15ME25KM0	2076551
	Head A: female connector, M12, 8-pin, angled Head B: Flying leads Cable: PUR, halogen-free, shielded, 7.5 m	DOL-127SW7M5E25KM0	6034783
	Head A: female connector, M12, 8-pin, angled Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, shielded, 7.5 m	DOL-127SW7M5E25KM0	2076549
Terminal and alignment brackets			
	4 pieces, Mounting kit 6, side bracket, rotatable, zinc diecast	BEF-1SHABAZN4	2019506
	4 pieces, Omega bracket, rotatable, fixable with only one screw, for mounting on the swivel mount	BEF-2SMMEAAL4	2044847

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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