

SCT Series

Universal Safety Light Curtain

The SCT series safety light curtains are mainly used for safety protection in cutting, hydraulic, robotic, and packaging equipment. The working voltage is DC24V. They are compact in appearance, adopt line synchronization technology, have a simple installation method, and are safe and reliable with self-checking functions.



Product Features:

- Robust housing with excellent shock resistance, and a maximum detection range of 6 meters.
 - Suitable for a variety of installation scenarios, applicable to automated equipment and small to medium-sized machinery.
- Complies with TYPE E safety rating, with comprehensive self-checking capabilities and strong resistance to electromagnetic interference.
- Features a dual-circuit self-checking output design for enhanced safety.
 - Offers multiple installation options and a variety of safety brackets to meet different installation requirements.



Model Explanation



Lorentzzi

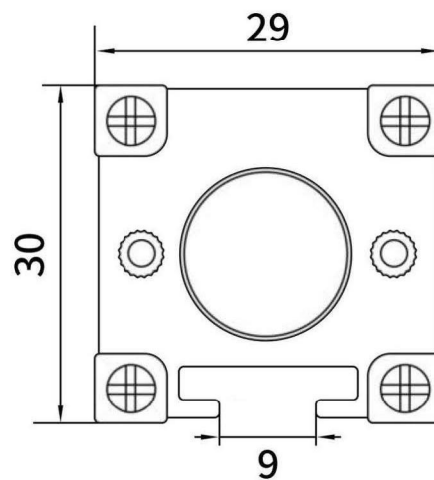
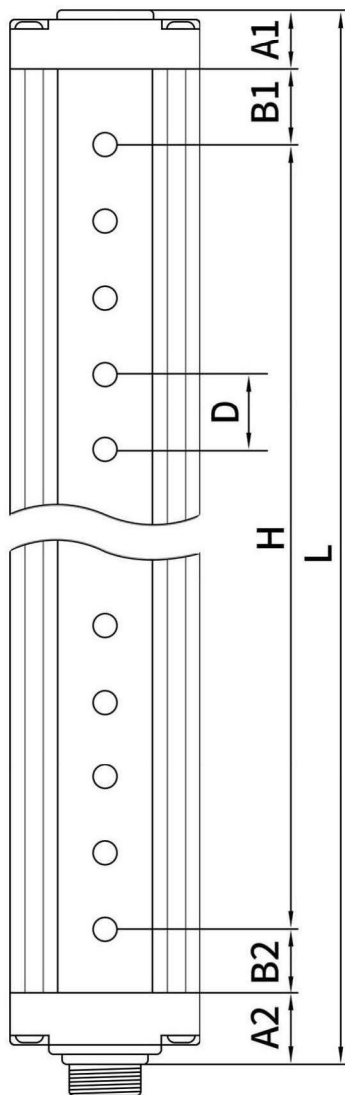
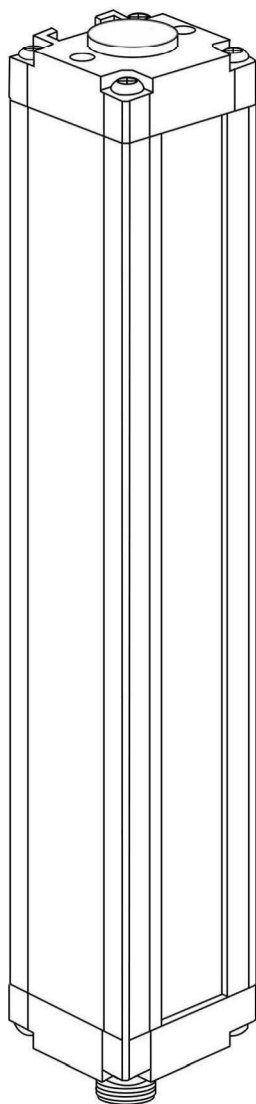
4,6,8,10... 10/20/40 mm

NB: NPN Normally Closed
NO: NPN Normally Open
PB: PNP Normally Closed
PA: PNP Normally Open

W: External controller
WI: Second-generation external controller
0: Built-in controller

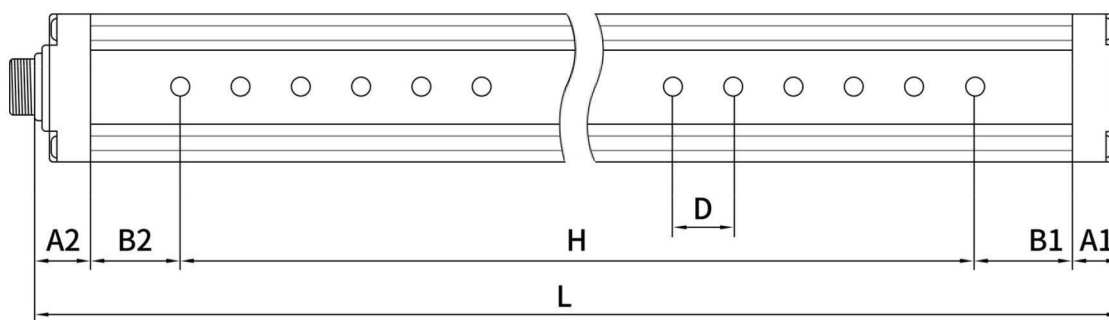
Parameters

Protection height	Optical axis spacing * (number of optical axes - 1)
Beam gap	10/20/40 mm
Beam quantity	10 mm spacing: 4, 6, 8, 10, 12... 20mm spacing: 4, 6, 8, 10, 12... 40mm spacing: 4, 6, 8, 10, 12...
Working voltage	24VDC±20%
Insulation voltage	≥ 500MΩ
Response time	< 10 ms
Protection distance	0.1-5.0 m, 0.1-10.0 m, 0.1-15.0 m, 0.1-20.0 m optional
Output current	≤ 200 mA
Power consumption	< 5 W
Cross-sectional area	29*30 mm
Protection grade	IP65
Output	NPN or PNP, NO or NC/ Relay, NO or NC(Single or dual way output optional)
Housing material	Aluminum alloy
Synchronization method	Line synchronization
Protection circuit	Overvoltage protection, reverse polarity protection, and overcurrent protection
Dielectric interference	AC 1500V,60s.No breakdown or flashover
Working temperature	-10-55°C
Working humidity	Relative humidity < 85% at a temperature of 20° C
Light interference resistance	10000 Lux (incident angle > 5 degrees)



A1: Top end cover	12 mm
A2: Bottom end cover	12 mm
B1: Dead zone on the PCB	10 mm
B2: Dead zone on the PCB	When the spacing D is 20 mm and the number of light axes is 4, the dimension is 10 mm. For all other specifications, it is 35 mm.
D: Optical axis spacing	10/20/40 mm
H: Protection height	(Number of optical axes-1) x Spacing
L: Total height	Height of top and bottom end covers + Dead zones on top and bottom + Protection height

SCT series selection table



D=Optical axis spacing 20 mm

Beam qty	H	L	Model
4	60	104	SCT-0420-NB
6	100	169	SCT-0620-NB
8	140	209	SCT-0820-NB
10	180	249	SCT-1020-NB
12	220	289	SCT-1220-NB
14	260	329	SCT-1420-NB
16	300	369	SCT-1620-NB
18	340	409	SCT-1820-NB
20	380	449	SCT-2020-NB
22	420	489	SCT-2220-NB
24	460	529	SCT-2420-NB
26	500	569	SCT-2620-NB
28	540	609	SCT-2820-NB
30	580	649	SCT-3020-NB
32	620	689	SCT-3220-NB
34	660	729	SCT-3420-NB
36	700	769	SCT-3620-NB
38	740	809	SCT-3820-NB
40	780	849	SCT-4020-NB
42	820	889	SCT-4220-NB
...
50	960	1029	SCT-5020-NB

D=Optical axis spacing 40 mm


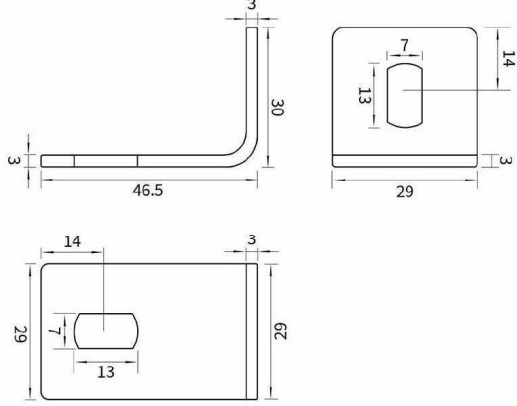

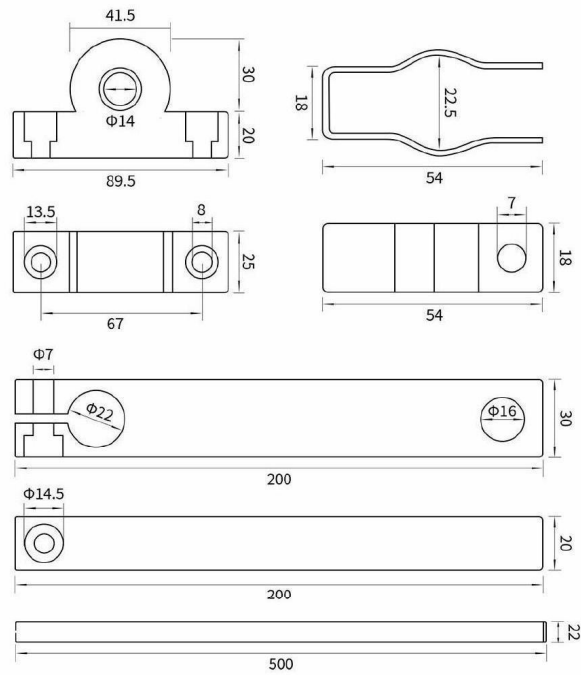

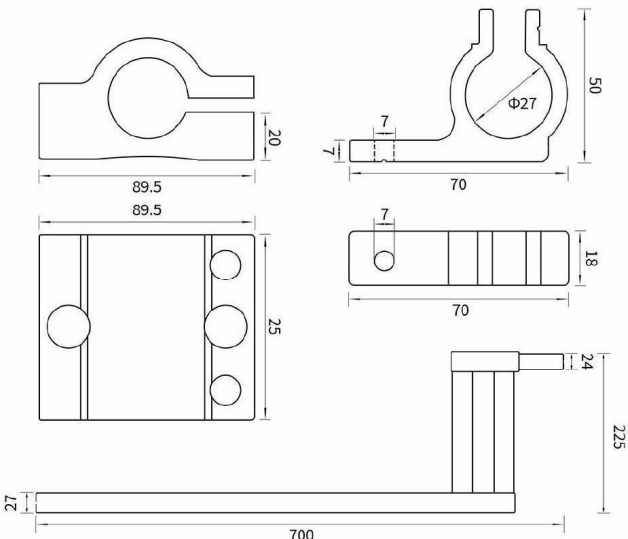
Beam qty	H	L	Model
4	120	189	SCT-0440-NB
6	200	269	SCT-0640-NB
8	280	349	SCT-0840-NB
10	360	429	SCT-1040-NB
12	440	409	SCT-1240-NB
14	520	589	SCT-1440-NB
16	600	669	SCT-1640-NB
18	680	749	SCT-1840-NB
20	760	829	SCT-2040-NB
22	840	909	SCT-2240-NB
24	920	989	SCT-2440-NB
26	1000	1069	SCT-2640-NB
28	1080	1149	SCT-2840-NB
30	1160	1229	SCT-3040-NB
32	1240	1309	SCT-3240-NB
34	1320	1389	SCT-3440-NB
36	1400	1469	SCT-3640-NB
38	1480	1549	SCT-3840-NB
40	1560	1629	SCT-4040-NB
42	1640	1709	SCT-4240-NB
...
50	1960	2029	SCT-5040-NB

Product accessories


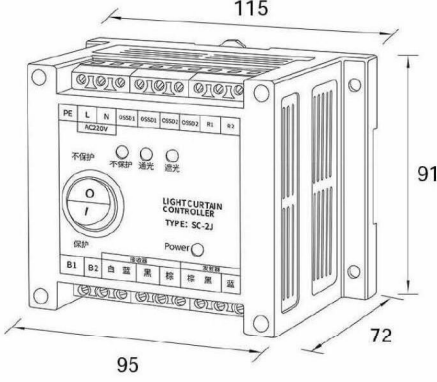

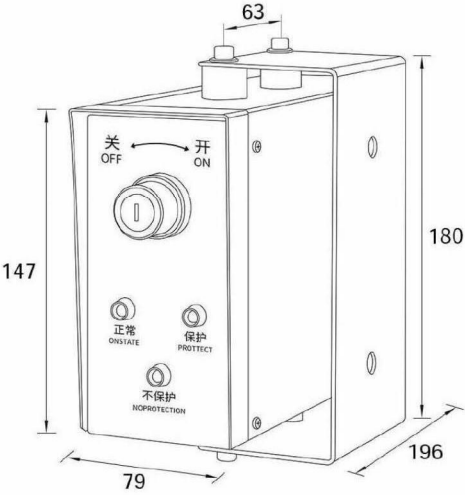

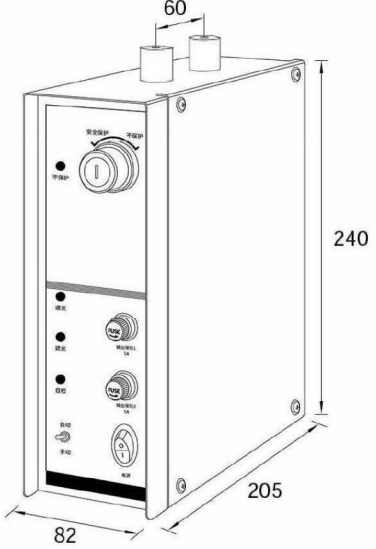


- 1** Safety light curtain × 2
Includes transmitter and receiver
- 2** Signal connection cable × 2
Cable length is approximately 3 meters, with customization available
- 3** Side mounting bracket accessory × 1
Standard bracket, with optional cantilever bracket available
- 4** User manual × 1
Includes wiring instructions, installation instructions, and usage instructions

Product photo	Name	Accessory	Accessories photo
	Side mounting bracket (Standard configuration)	<ul style="list-style-type: none"> 1. Side mounting bracket*4 2. M6 long screws* 4 3. M6 short screws* 4 4. Spring washers *4 5. Washers*4 6. Nuts* 4 7. Sliding blocks*4 	
	Cantilever bracket (Optional)	<ul style="list-style-type: none"> 1. Cantilever base*2 2. Rotating arm* 2 3. Cantilever bracket rod*2 4. Standard sliding block*4 5. M5 short screws*4 6. Washers*4 7. Spring washers*4 8. M5 long screws*4 9. M18 short screws*2 10. Mounting bracket*4 11. M5 nuts*4 12. M8 screws* 8 	
	Integrated cantilever bracket (Optional)	<ul style="list-style-type: none"> 1. Integrated steel pipe $\Phi 27*2$ 2. Bracket base*2 3. M6 hex short screws*4 4. M6 cross short screws*4 5. M6 long screws*4 6. M6 flat head screws*4 7. M6 spring washers*12 8. "b" type clamps*4 9. M8 long screws*4 10. M8 spring washers*4 11. M6 washers*8 12. Vibration dampers*4 13. Controller bracket*2 	

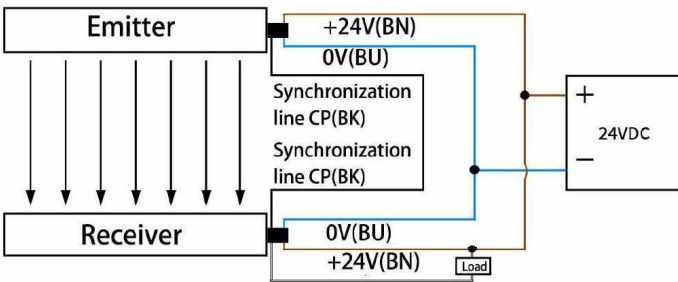
Product photo	Name	Dimensional drawing (unit: mm)
	<p>Side mounting bracket (Standard configuration)</p>	 <p>Technical drawing showing side and front views of the side mounting bracket. Dimensions include: 3, 46.5, 30, 14, 7, 13, 29, 3, 14, 29, 13, 62, 3.</p>
	<p>Cantilever bracket (Optional)</p>	 <p>Technical drawing showing multiple views of the cantilever bracket. Dimensions include: 41.5, 30, 20, 89.5, 18, 22.5, 54, 7, 18, 54, 25, 67, 13.5, 8, 200, 30, 20, 200, 22, 500, 22, 500, 22, 500.</p>
	<p>Integrated cantilever bracket (Optional)</p>	 <p>Technical drawing showing multiple views of the integrated cantilever bracket. Dimensions include: 89.5, 20, 89.5, 70, 50, 7, 7, 18, 70, 24, 225, 700, 17.</p>

Controller selection

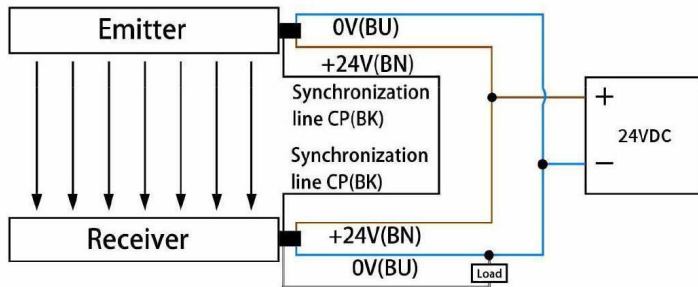
Product photo	Name	Working voltage	Product dimension(Unit: mm)
	<p>Q-type internal DIN rail or screw mounting controller (Optional)</p>	<p>AC110-220V</p>	
	<p>W-type external mounting controller (Optional)</p>	<p>AC110-220V or 380VAC</p>	
	<p>WII-type external mounting controller (Optional)</p>	<p>AC110-220V or 380VAC</p>	

Wiring diagram

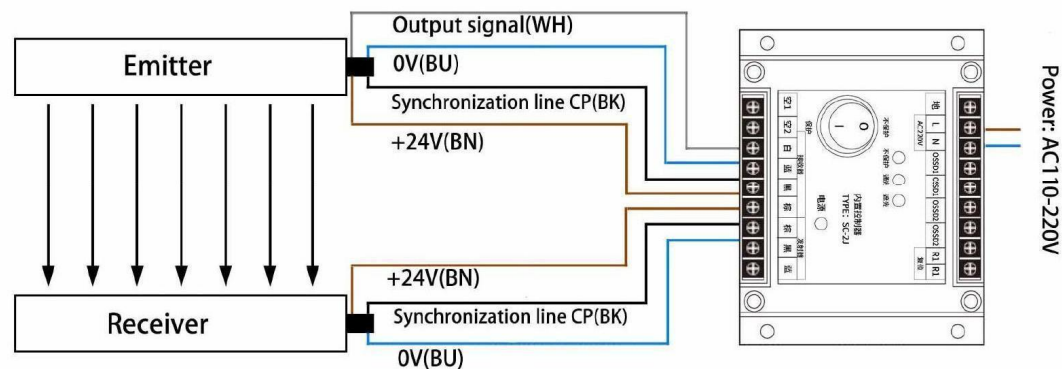
Wiring diagram for 24V voltage with NPN output



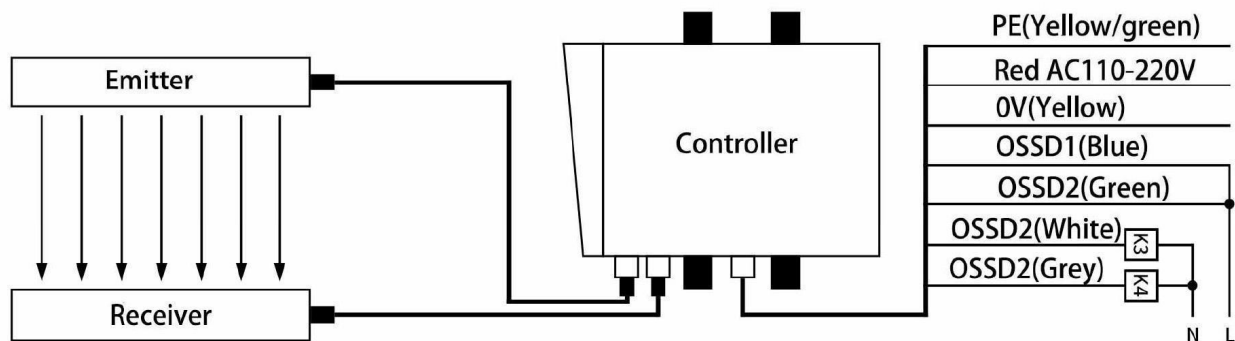
Wiring diagram for 24V voltage with PNP output



Wiring diagram for AC110~220V voltage with built-in (Q) controller



Wiring diagram for AC110~220V voltage with external (W or WII) controller





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