

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 width of 20 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.

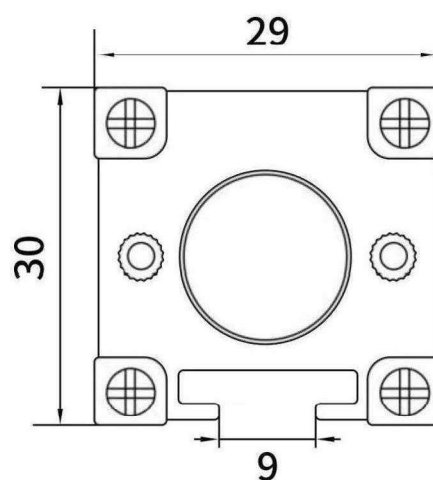
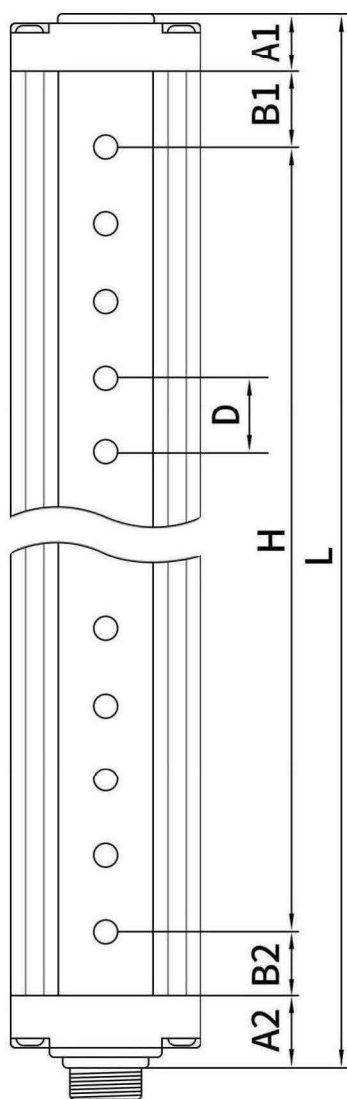
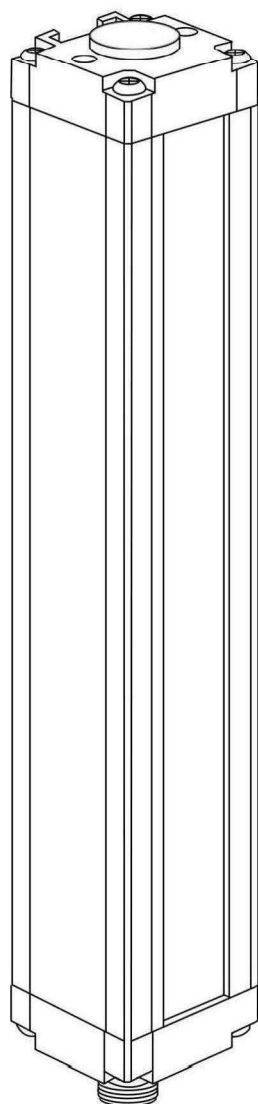


Model Explanation

LZ	—	SCT	—	04		20	—	NB	—	W
Brand		Model		Beam Qty		Optical Axis Spacing		Output		Controller
Lorentzzi		Series		4,6,8,10...		10/20/40 mm		NA: NPN+NO, NB: NPN+NC, NC: NPN+NO&NC, PA: PNP+NO, PB: PNP+NC, PC: PNP+NC&NO.		W: External controller WI: Second-generation external controller 0: Built-in controller

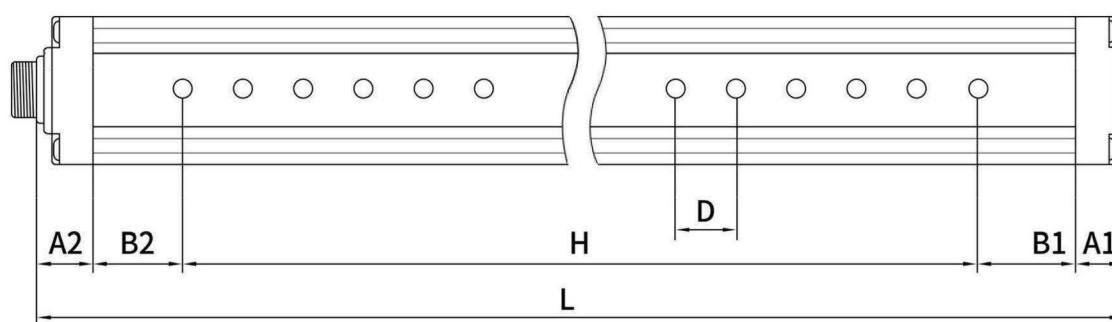
Parameters

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 I500V,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	10 mm
B2: Dead zone	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	LZ-SCT-0420-XX
6	100	169	LZ-SCT-0620-XX
8	140	209	LZ-SCT-0820-XX
10	180	249	LZ-SCT-1020-XX
12	220	289	LZ-SCT-1220-XX
14	260	329	LZ-SCT-1420-XX
16	300	369	LZ-SCT-1620-XX
18	340	409	LZ-SCT-1820-XX
20	380	449	LZ-SCT-2020-XX
22	420	489	LZ-SCT-2220-XX
24	460	529	LZ-SCT-2420-XX
26	500	569	LZ-SCT-2620-XX
28	540	609	LZ-SCT-2820-XX
30	580	649	LZ-SCT-3020-XX
32	620	689	LZ-SCT-3220-XX
34	660	729	LZ-SCT-3420-XX
36	700	769	LZ-SCT-3620-XX
38	740	809	LZ-SCT-3820-XX
40	780	849	LZ-SCT-4020-XX
42	820	889	LZ-SCT-4220-XX
...	...	...	...
50	960	1029	LZ-SCT-5020-XX

D=Optical axis spacing 40 mm

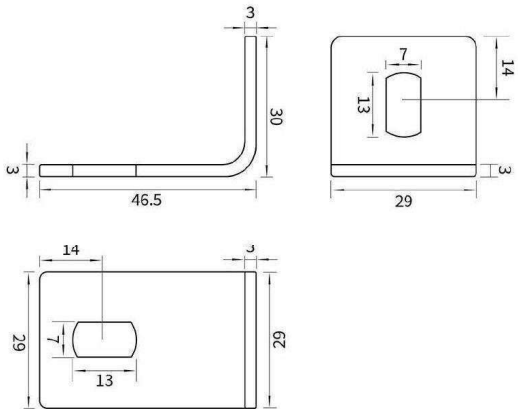
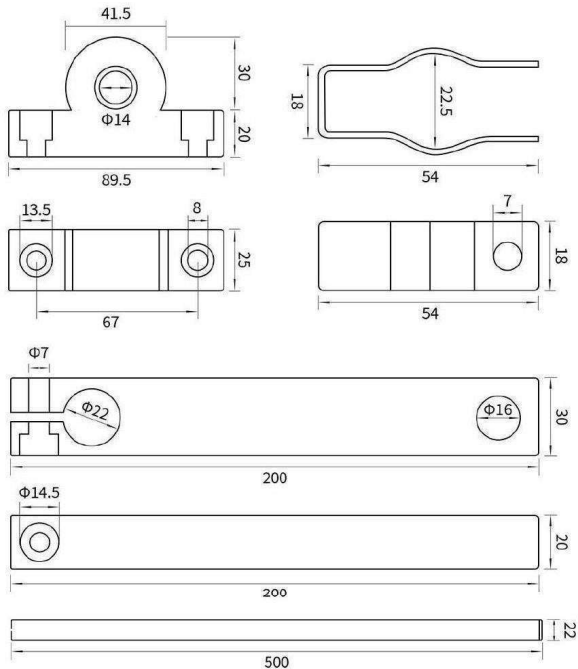
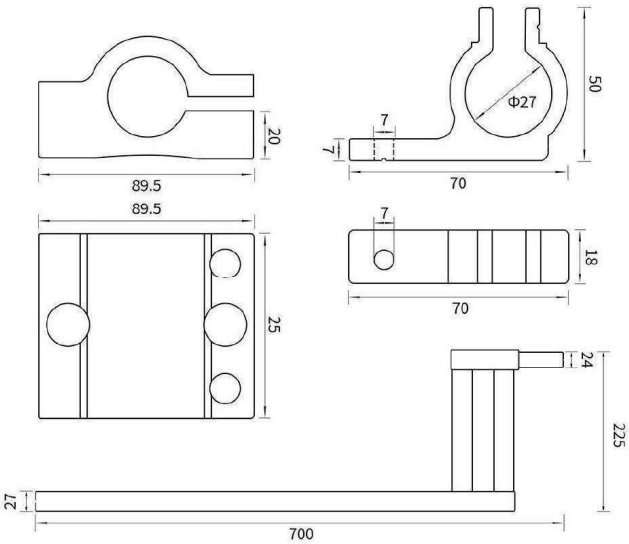
Beam qty	H	L	Model
4	120	189	LZ-SCT-0440-XX
6	200	269	LZ-SCT-0640-XX
8	280	349	LZ-SCT-0840-XX
10	360	429	LZ-SCT-1040-XX
12	440	409	LZ-SCT-1240-XX
14	520	589	LZ-SCT-1440-XX
16	600	669	LZ-SCT-1640-XX
18	680	749	LZ-SCT-1840-XX
20	760	829	LZ-SCT-2040-XX
22	840	909	LZ-SCT-2240-XX
24	920	989	LZ-SCT-2440-XX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

Product accessories

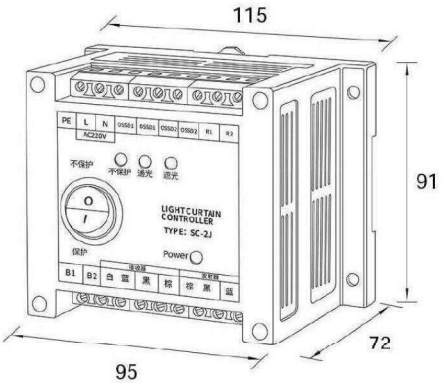
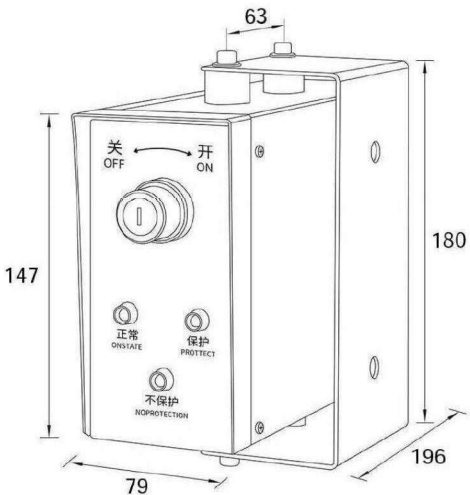
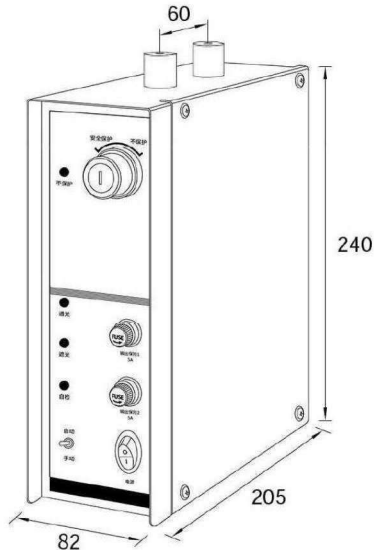


- 1** Safety light curtain × 2
Includes transmitter and receiver
- 2** Signal connection cable × 2
Cable length is approximately 3 meters, with customization available
- 3** Side mounting bracket accessory × 1
Standard bracket, with optional cantilever bracket available
- 4** User manual × 1
Includes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

Product photo	Name	Accessory	Accessories photo
	Side mounting bracket (Standard configuration)	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)	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)	1. Integrated steel pipe Φ27*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	

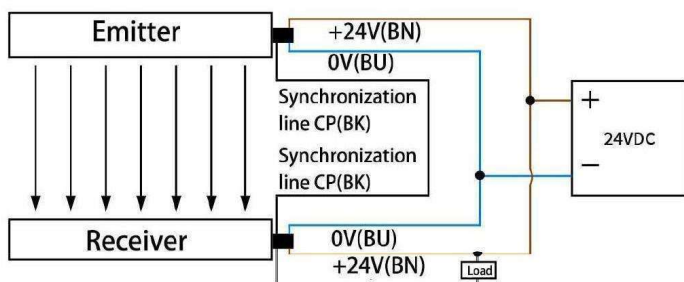
Product photo	Name	Dimensional drawing (unit: mm)
	Side mounting bracket (Standard configuration)	
	Cantilever bracket (Optional)	
	Integrated cantilever bracket (Optional)	

Controller selection

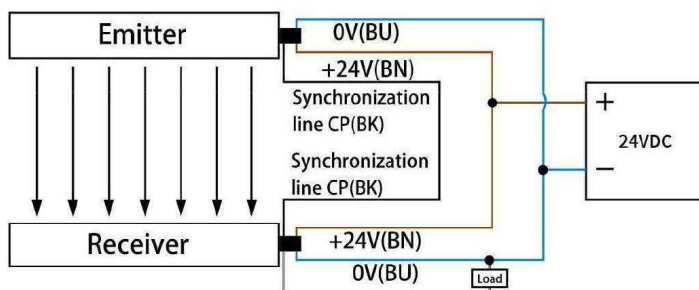
Product photo	Name	Working voltage	Product dimension(Unit: mm)
	Q-type internal DIN rail or screw mounting controller (Optional)	AC110-220V	
	W-type external mounting controller (Optional)	AC110-220V or 380VAC	
	WII-type external mounting controller (Optional)	AC110-220V or 380VAC	

Wiring diagram

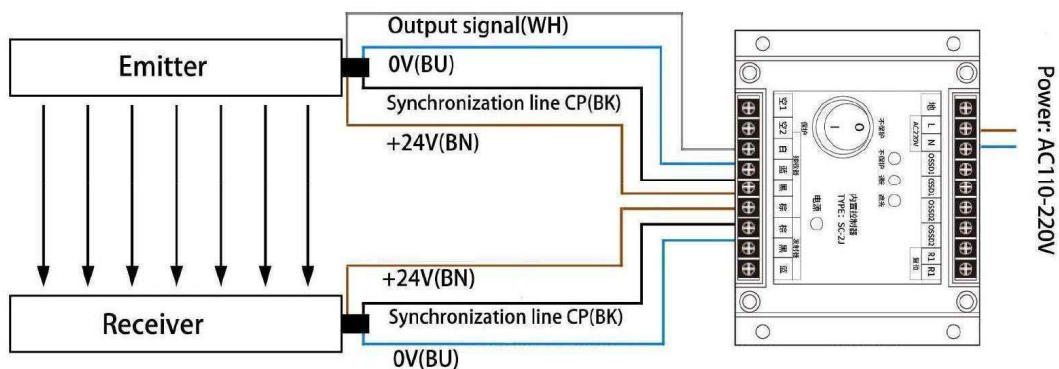
Wiring diagram for 24V voltage with NPN output



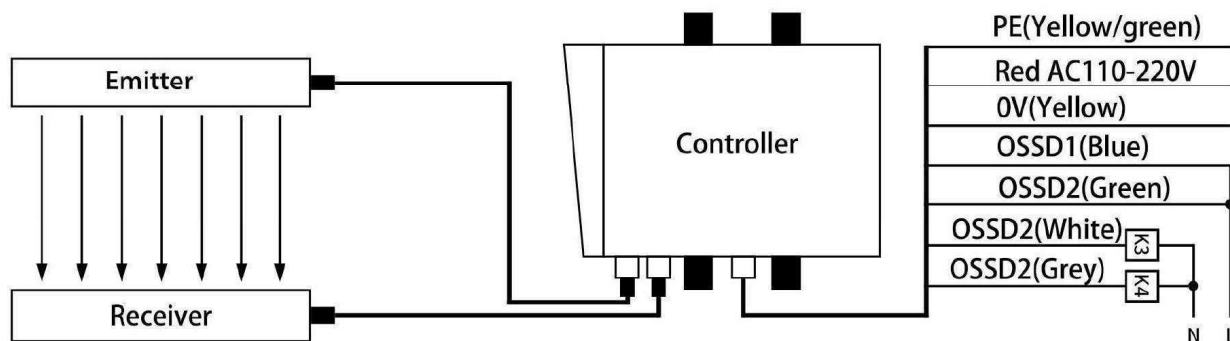
Wiring diagram for 24V voltage with PNP output

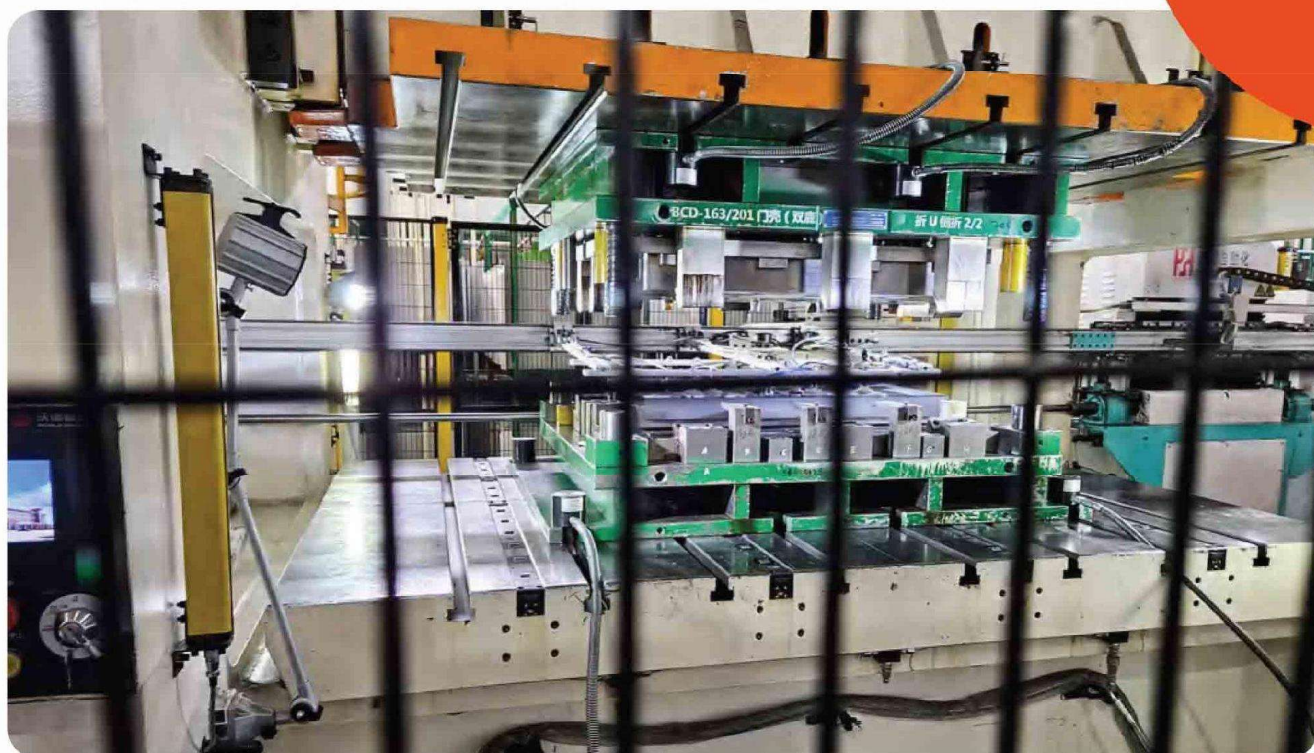


Wiring diagram for AC110~220V voltage with built-in (Q) controller



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





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