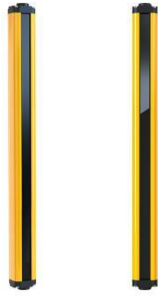


## Safety light curtain **SFN** series



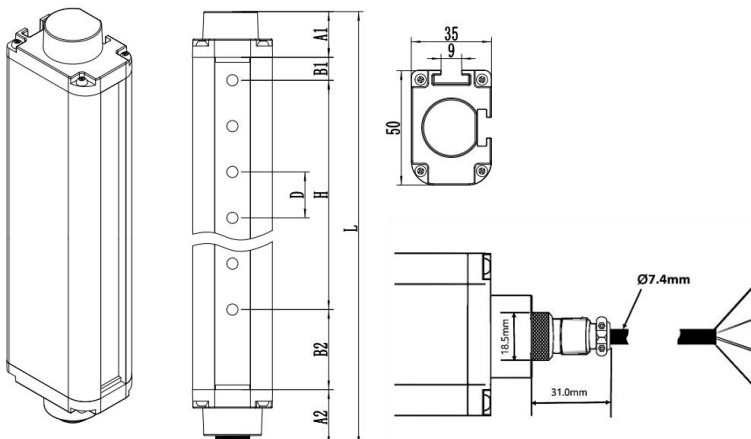
### Features

- ◆ Through beam detection;
- ◆ Adopt dual-loop self-inspection output design, high safety and reliability;
- ◆ Short response time;
- ◆ Strong anti-electromagnetic interference ability.

### Technical specification

Supply voltage	DC 10-30V (ripple <math>\pm 10\%</math>)
Capacity	<math>< 5W</math>
Beam space	10mm, 20mm, 40mm
Resolution	20mm, 30mm, 50mm
Beams	10mm beam gap: 8, 12, 16...320; 20mm beam gap: 4, 6, 8...160; 40mm beam gap: 4, 6, 8...120
Protective height	Protective height $H = (N-1) \times \text{beam gap}$ , N is beam quantity
Light source	940nm infrared LED
Response time	Response time = $(N \times 0.1\text{ms}) + 0.4\text{ms}$ (N is beam quantity)
Output mode (OSSD)	PNP/NPN*2 semiconductors, current <math>< 200\text{mA}</math>, residual voltage <math>< 2V</math>, leakage current <math>< 1\text{mA}</math>
Circuit protection	Overload voltage protection, reverse polarity protection, over-current protection
Sensing distance	0.1~5m, 0.1~10m, 0.1~30m (10mm space: 8-160 beams, 20mm space: 4~80 beams, 40mm space: 4~76 beams) (10mm beam gap: 8-160 beams; 20mm beam gap: 4-80 beams; 40mm beam gap: 4-76 beams)
Anti-optical interference	10000Lux (Angle of incidence >math>2.5^\circ</math>)
Synchronization	Line synchronization
Protection degree	IP65
Housing material	Aluminum alloy
Ambient temperature	Operating: $-10^\circ\text{C} \sim 55^\circ\text{C}$ (No condensation), Storage: $-30^\circ\text{C} \sim 70^\circ\text{C}$ (No condensation)
Ambient humidity	85%max@20°C
Sectional dimension	35*50mm
Connection	GX16 aviation plug (Emitter: three-core cable; Receiver: five-core cable)
Accessories	L-shaped bracket (4PCS); Slider (4PCS); M6 washer (4PCS); M6 spring washer (4PCS); M6*16 screws (4PCS); M6*8 screws (4PCS); GX16-3cable (2.5m,PVC) *1; GX16-5cable (3.5m,PVC) *1

### Dimensions



A1: Height of upper cap (17mm)

A2: Height of bottom cap, height of aviation terminal (28mm)

Beam gap D (mm)	10	20	40
Upper stop B1 (mm)	5	10	10
Bottom stop B2 (mm)	30	35	35

H: Protective height

L: Total height

**Model selection (Customization is acceptable)**

Beam gap (D)	Beam quantity	Protective Height (H) $H=(N-1)*D$	Total height (L) $L=A1+B1+A2+B2+H$	NPN output mode	PNP output mode
20	4	60	125	SFN20004-TM05DNC	SFN20004-TM05DPC
20	8	140	230	SFN20008-TM05DNC	SFN20008-TM05DPC
20	12	220	310	SFN20012-TM05DNC	SFN20012-TM05DPC
20	16	300	390	SFN20016-TM05DNC	SFN20016-TM05DPC
20	20	380	470	SFN20020-TM05DNC	SFN20020-TM05DPC
20	24	460	550	SFN20024-TM05DNC	SFN20024-TM05DPC
20	28	540	630	SFN20028-TM05DNC	SFN20028-TM05DPC
20	32	620	710	SFN20032-TM05DNC	SFN20032-TM05DPC
20	36	700	790	SFN20036-TM05DNC	SFN20036-TM05DPC
20	40	780	870	SFN20040-TM05DNC	SFN20040-TM05DPC
20	44	860	950	SFN20044-TM05DNC	SFN20044-TM05DPC
20	48	940	1030	SFN20048-TM05DNC	SFN20048-TM05DPC
20	52	1020	1100	SFN20052-TM05DNC	SFN20052-TM05DPC
20	56	1100	1190	SFN20056-TM05DNC	SFN20056-TM05DPC
20	60	1180	1270	SFN20060-TM05DNC	SFN20060-TM05DPC
20	64	1260	1350	SFN20064-TM05DNC	SFN20064-TM05DPC
...	...	...	...	...	...
20	160	3180	3270	SFN20160-TM05DNC	SFN20160-TM05DPC
40	4	120	210	SFN40004-TM05DNC	SFN40004-TM05DPC
40	6	200	290	SFN40006-TM05DNC	SFN40006-TM05DPC
40	8	280	370	SFN40008-TM05DNC	SFN40008-TM05DPC
40	10	360	450	SFN40010-TM05DNC	SFN40010-TM05DPC
40	12	440	530	SFN40012-TM05DNC	SFN40012-TM05DPC
40	14	520	610	SFN40014-TM05DNC	SFN40014-TM05DPC
40	16	600	690	SFN40016-TM05DNC	SFN40016-TM05DPC
40	18	680	770	SFN40018-TM05DNC	SFN40018-TM05DPC
40	20	760	850	SFN40020-TM05DNC	SFN40020-TM05DPC
40	22	840	930	SFN40022-TM05DNC	SFN40022-TM05DPC
40	24	920	1010	SFN40024-TM05DNC	SFN40024-TM05DPC
40	26	1000	1090	SFN40026-TM05DNC	SFN40026-TM05DPC
40	28	1080	1170	SFN40028-TM05DNC	SFN40028-TM05DPC
40	30	1160	1250	SFN40030-TM05DNC	SFN40030-TM05DPC
40	32	1240	1330	SFN40032-TM05DNC	SFN40032-TM05DPC
...	...	...	...	...	...
40	120	4760	4850	SFN40120-TM05DNC	SFN40120-TM05DPC

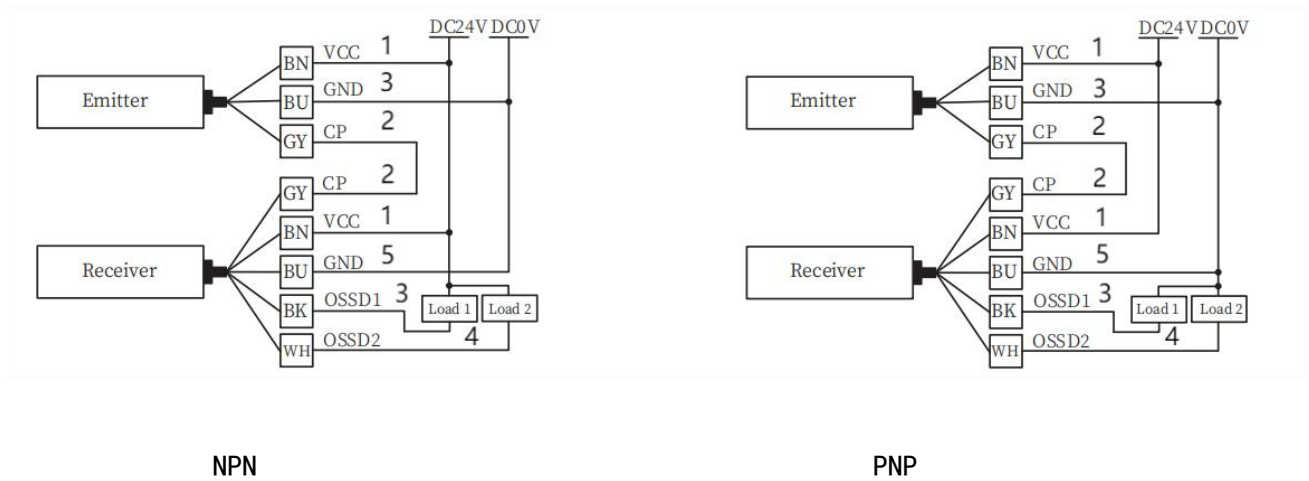
**Model description:**

SFN 20064-T M05 DNC

DNC: DC10–30V, NPN, NC  
 M05: Sensing distance: 5m  
 T: Through beam  
 20064: 20mm beam space, 64 beam quantities

SFN: Light curtain N series

**Wiring diagram:**



**L1 Bracket dimensions :**

