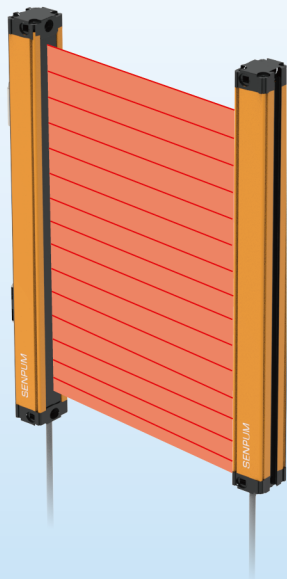


# Slim Anti-Interference Area Sensor SA-V Series



Ask SENPUM

+86-755-83330055

Fast Delivery Standard Models



Most products are in stock. Upon receiving your order, we will arrange prompt shipment to minimize your downtime-related costs and losses.



WeChat



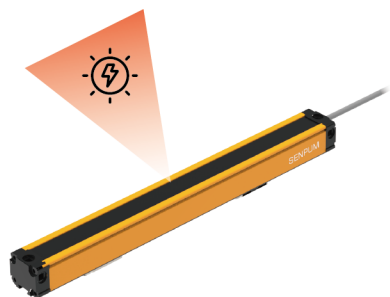
WhatsApp



LINE

## Excellent EMI/light interference immunity

Excellent EMI/light interference immunity with uncompromised detection.



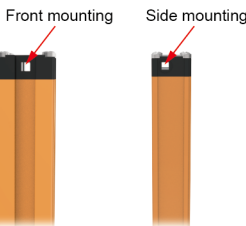
## Compact yet rugged housing

IP65 housing protection rating ensures the highest impact resistance in its class.



## No brackets required, making installation simple

The product has fixed mounting holes at the top and bottom, eliminating the need for mounting brackets. It can be installed simply and conveniently with M4 screws.



L-type bracket sold separately for special applications.



### More Features

- NPN/PNP output modes available.
- No bracket installation required; direct installation is simple and convenient.
- The number of optical axes and detection height can be selected according to actual requirements
- For safety protection, please select SA2A/SA4C/4D safety light encoder.
- 10/20/40 mm optical axis spacing for different sizes of inspection objects
- High-quality ICs to ensure high product quality
- Sensor and cable are integrated for easier wiring.
- Only for general functional detection, not recommended for human safety protection

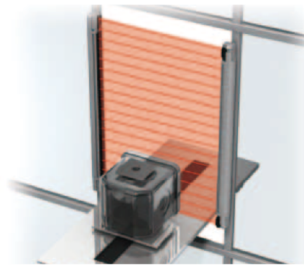
Applications



Adaptive function, detects product height and width



Abnormal detection, material positioning, direction recognition, shape tracking, etc.



Detects conveyor belt material passing through

Safety Light Curtain Selection Guide

Please use the following steps to help you select the best SA-V Series model for your situation.

Step 1

▶

Step 2

▶

Step 3

▶

Step 4

Select the main unit

Select the optical axis spacing

Select the mounting bracket

Select the mounting method as required

Step 1

Step 2

↓

Optical axis spacing 10 mm

Optical axis spacing 20 mm

Optical axis spacing 40 mm

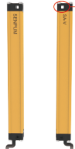
Step 3

↓

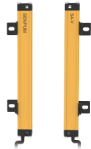


L-type mounting bracket  
OW-SAV001

Step 4



Screw mounting holes



4 x M3 fixing screws

L-type mounting

|                                        |
|----------------------------------------|
| Fiber Optic Sensors                    |
| Photoelectric Sensors                  |
| Color Sensors                          |
| Laser Sensors                          |
| Proximity Sensors                      |
| Precision Contact Sensors              |
| Area Sensors/<br>Safety Light Curtains |
| Laser Scanners                         |
| Digital Contact Sensors                |
| Laser Displacement<br>Sensors          |
| Laser Micrometers                      |
| Confocal Displacement<br>Sensors       |
| Barcode Readers                        |
| AI Vision Sensors                      |
| RFID                                   |
| Infrared Temperature<br>Sensors        |
| Pressure Sensors                       |
| Flow Sensors                           |
| Magnetic Sensors                       |
| Ultrasonic Sensors                     |
| Magnetic Scales                        |
| Static Eliminators                     |



SA-V

Slim Anti-Interference Area Sensor

Selection Process

Please follow the selection steps 2–5 to select the model and parameters and then order.

Model(SA-V20-16-035-\*)

①

②

③

④

⑤

- ① Series name

④ Detection distance (m)
- ② Optical axis spacing (mm)

⑤ Output signal (N: NPN / P: PNP)
- ③ Number of optical axes

Note: All SA-V series products are normally closed outputs.

Selection List

Optical axis spacing 10 mm



Unit: mm

| Model            | A Overall length | Number of optical axes | B Detection height |
|------------------|------------------|------------------------|--------------------|
| SA-V10-16-035-*  | 197              | 16                     | 150                |
| SA-V10-24-035-*  | 277              | 24                     | 230                |
| SA-V10-32-035-*  | 357              | 32                     | 310                |
| SA-V10-40-035-*  | 437              | 40                     | 390                |
| SA-V10-48-035-*  | 517              | 48                     | 470                |
| SA-V10-56-035-*  | 597              | 56                     | 550                |
| SA-V10-64-035-*  | 677              | 64                     | 630                |
| SA-V10-72-035-*  | 757              | 72                     | 710                |
| SA-V10-80-035-*  | 837              | 80                     | 790                |
| SA-V10-88-035-*  | 917              | 88                     | 870                |
| SA-V10-96-035-*  | 997              | 96                     | 950                |
| SA-V10-104-035-* | 1077             | 104                    | 1030               |
| SA-V10-112-035-* | 1157             | 112                    | 1110               |
| SA-V10-120-035-* | 1237             | 120                    | 1190               |
| SA-V10-128-035-* | 1317             | 128                    | 1270               |
| SA-V10-136-035-* | 1397             | 136                    | 1350               |
| SA-V10-144-035-* | 1477             | 144                    | 1430               |
| SA-V10-152-035-* | 1557             | 152                    | 1510               |
| SA-V10-160-035-* | 1637             | 160                    | 1590               |
| SA-V10-168-035-* | 1717             | 168                    | 1670               |

Optical axis spacing 20 mm



Unit: mm

| Model           | A Overall length | Number of optical axes | B Detection height |
|-----------------|------------------|------------------------|--------------------|
| SA-V20-08-035-* | 182              | 8                      | 140                |
| SA-V20-12-035-* | 262              | 12                     | 220                |
| SA-V20-16-035-* | 342              | 16                     | 300                |
| SA-V20-20-035-* | 422              | 20                     | 380                |
| SA-V20-24-035-* | 502              | 24                     | 460                |
| SA-V20-28-035-* | 582              | 28                     | 540                |
| SA-V20-32-035-* | 662              | 32                     | 620                |
| SA-V20-36-035-* | 742              | 36                     | 700                |
| SA-V20-40-035-* | 822              | 40                     | 780                |
| SA-V20-44-035-* | 902              | 44                     | 860                |
| SA-V20-48-035-* | 982              | 48                     | 940                |
| SA-V20-52-035-* | 1062             | 52                     | 1020               |
| SA-V20-56-035-* | 1142             | 56                     | 1100               |
| SA-V20-60-035-* | 1222             | 60                     | 1180               |
| SA-V20-64-035-* | 1302             | 64                     | 1260               |
| SA-V20-68-035-* | 1382             | 68                     | 1340               |
| SA-V20-72-035-* | 1462             | 72                     | 1420               |
| SA-V20-76-035-* | 1542             | 76                     | 1500               |
| SA-V20-80-035-* | 1622             | 80                     | 1580               |
| SA-V20-84-035-* | 1702             | 84                     | 1660               |
| SA-V20-88-035-* | 1782             | 88                     | 1740               |
| SA-V20-92-035-* | 1862             | 92                     | 1820               |
| SA-V20-96-035-* | 1942             | 96                     | 1900               |

\*1 Customized production is available for special requirements.

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Selection List

Optical axis spacing 40 mm



Unit: mm

| Model           | A Overall length | Number of optical axes | B Detection height |
|-----------------|------------------|------------------------|--------------------|
| SA-V40-04-035-* | 182              | 4                      | 120                |
| SA-V40-06-035-* | 262              | 6                      | 200                |
| SA-V40-08-035-* | 342              | 8                      | 280                |
| SA-V40-10-035-* | 422              | 10                     | 360                |
| SA-V40-12-035-* | 502              | 12                     | 440                |
| SA-V40-14-035-* | 582              | 14                     | 520                |
| SA-V40-16-035-* | 662              | 16                     | 600                |
| SA-V40-18-035-* | 742              | 18                     | 680                |
| SA-V40-20-035-* | 822              | 20                     | 760                |
| SA-V40-22-035-* | 902              | 22                     | 840                |
| SA-V40-24-035-* | 982              | 24                     | 920                |
| SA-V40-26-035-* | 1062             | 26                     | 1000               |
| SA-V40-28-035-* | 1142             | 28                     | 1080               |
| SA-V40-30-035-* | 1222             | 30                     | 1160               |
| SA-V40-32-035-* | 1302             | 32                     | 1240               |
| SA-V40-34-035-* | 1382             | 34                     | 1320               |
| SA-V40-36-035-* | 1462             | 36                     | 1400               |
| SA-V40-38-035-* | 1542             | 38                     | 1480               |
| SA-V40-40-035-* | 1622             | 40                     | 1560               |
| SA-V40-42-035-* | 1702             | 42                     | 1640               |
| SA-V40-44-035-* | 1782             | 44                     | 1720               |
| SA-V40-46-035-* | 1862             | 46                     | 1800               |
| SA-V40-48-035-* | 1942             | 48                     | 1880               |

\* Customized production is available for special requirements.

Specifications

| Model                    | SA-V                                                           |
|--------------------------|----------------------------------------------------------------|
| Number of optical axes   | 4 to 168                                                       |
| Optical axis spacing     | 10/20/40 mm                                                    |
| Cross-section dimensions | 26.4 mm x 21.7 mm                                              |
| Detection distance       | 0.4 to 3.5 m                                                   |
| Protection height        | 120 to 1900 mm                                                 |
| Response time            | Maximum 20 ms                                                  |
| Output type              | Dual normally closed outputs; NPN / PNP selectable             |
| Power voltage            | 24 VDC ±10%, Ripple Voltage (P-P): 10% max.                    |
| Power consumption        | 3 to 8 W                                                       |
| Operating current        | 200 mA max.                                                    |
| Protection circuit       | Reverse connection protection, output short-circuit protection |
| Interference immunity    | 10,000 lux (angle of incidence ≥ 5°)                           |
| Ambient temperature      | -10 to +55 °C (no freezing)                                    |
| Relative humidity        | 35 to 85% RH, 20 °C                                            |
| Protection class         | IP65                                                           |
| Material                 | Housing: Aluminum alloy                                        |
| Mounting method          | Built-in mounting holes (L-side mounting available separately) |
| Vibration resistant      | 10 to 55 Hz, amplitude: 0.35 mm                                |
| Shock resistant          | 10 g, 16 ms, 1000 cycles per X/Y/Z axis                        |
| Cable                    | 3 m lead-out type                                              |

Mounting Accessories

| Appearance | Model     | Mounting method |
|------------|-----------|-----------------|
|            | OW-SAV001 | L-type bracket  |

Fiber Optic Sensors

Photoelectric Sensors

Color Sensors

Laser Sensors

Proximity Sensors

Precision Contact  
Sensors

Area Sensors/  
Safety Light Curtains

Laser Scanners

Digital Contact Sensors

Laser Displacemen  
Sensors

Laser Micrometers

Confocal Displacement  
Sensors

Barcode Readers

AI Vision Sensors

RFID

Infrared Temperature  
Sensors

Pressure Sensors

Flow Sensors

Magnetic Sensors

Ultrasonic Sensors

Magnetic Scales

Static Eliminators



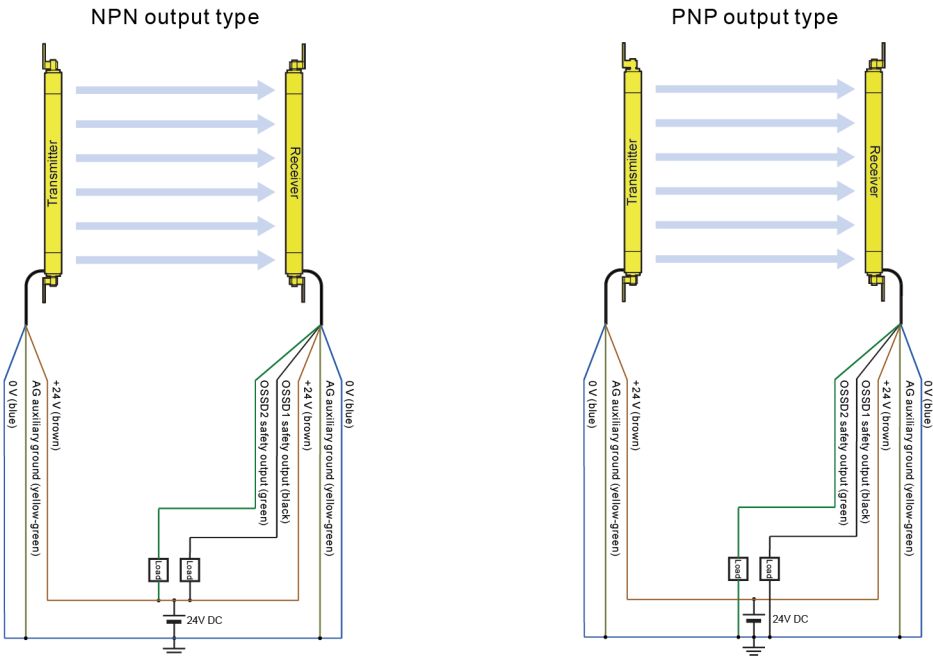
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SA-V

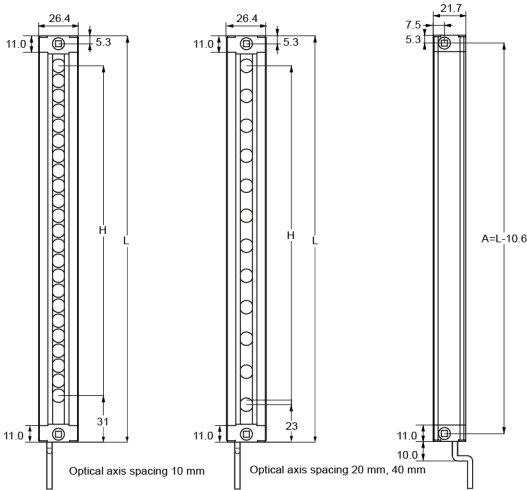
Slim Anti-Interference Area Sensor

I/O Circuit Diagrams



Dimensions

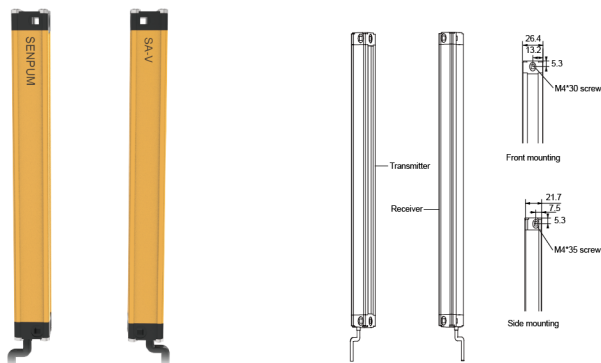
Unit: mm



Main unit diagram

Dimensions

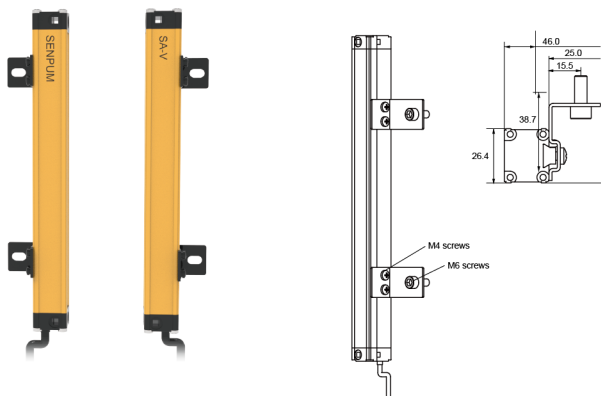
Upper/Lower mounting



4 x M3 fixing screws

L-type mounting bracket

OW-SAV001



L-Type side mounting

Area Sensors/Safety Light Curtains/  
Safety Interlock Switches

SA-V

SA-M

SA-H

SA2A

SL-R

SA-T

DS-M

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Photoelectric Sensors

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