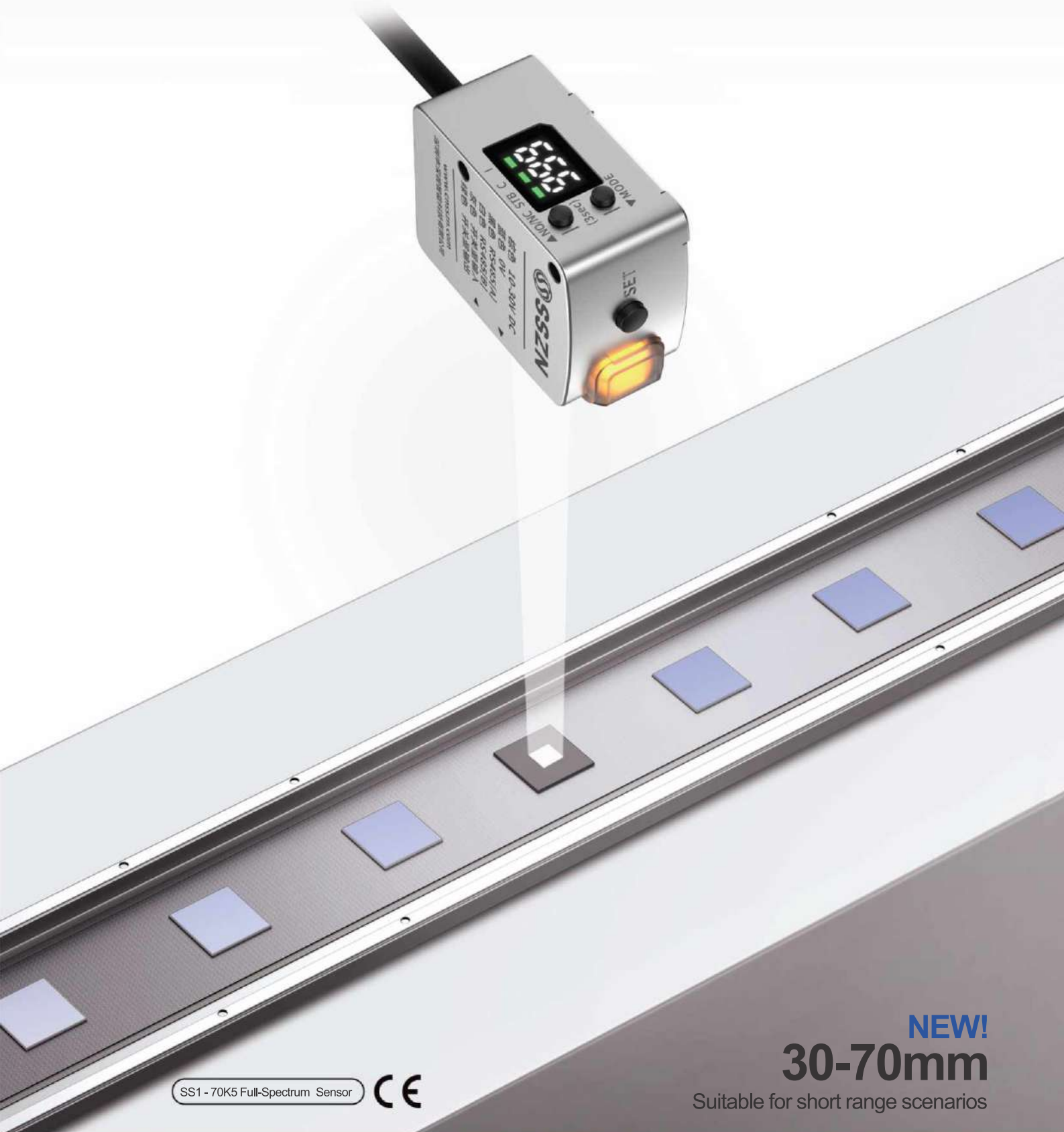


NEW!

Full-Spectrum Sensor

SS1 - 70K5 Color Sensor



SS1 - 70K5 Full-Spectrum Sensor



NEW!
30-70mm

Suitable for short range scenarios



About SinceVision

SinceVision was established in 2014, with its headquarters located in Nanshan District, Shenzhen. It is a high-tech enterprise specializing in the research and development and production of industrial sensors.

Since its establishment, SinceVision has taken 3D industrial sensor as the entry point, and launched line laser, point laser, point spectrum correction sensor successively. In 2021, SinceVision entered the research and defense market and launched several product lines such as high-speed camera, totaling dozens of product series into the batch sales stage. At present, the products developed and produced have successfully broken the foreign monopoly, and become the leader of Chinese brand. In addition, some of the performance parameters of the mature products represented by the line laser have achieved world leadership, and gradually become a new benchmark to lead the development of the industry.

Today, the SinceVision brand is gradually becoming familiar to the automation people. We have served hundreds of customers, among which the terminal has covered domestic and foreign consumer electronics, carp electricity, photovoltaic major head brands. At present, we are sparing no effort to promote the refinement of product solutions based on niche areas, using our products and services to empower more fields. From semiconductor/panel, to automobile/railway; from plastic/film, to food/textile, to contribute to the cost reduction and efficiency of more industries. With the rise of labor cost and product quality upgrade, the future of industrial automation is unstoppable. With years of experience in R&D of 3D industrial sensors, Deep Vision has precipitated a comprehensive R&D platform involving optics, mechanics, electricity and software, as well as a mature product control system. In the future, Deep Vision will spare no effort to improve the R&D and production system, and strive to build a world-class industrial product R&D team. With the ultimate craftsmanship of Deep Vision people, we will continue to tackle high-end sensors, so that Chinese automation has a national brand available and a national brand can be trusted.

In order to provide our customers with fast and convenient services, we have set up many offices in China and overseas.

China

Shenzhen, Dongguan, Suzhou (Kunshan), Wuxi, Shanghai, Beijing, Chengdu, Wuhan, Xi'an, Hefei, Ningde, Huizhou, Taipei

Overseas

South Korea, Vietnam, Thailand, Malaysia, Singapore

MILESTONE

2014

April

Shenzhen SinceVision Technology Co.,Ltd. was officially established

2016

March

Released the first generation of 3D Laser Profiler the SR7000 series.

2017

March

Obtained the titles of "National High-tech Enterprise" and "Shenzhen Industrial Stable Growth Enterprise."

2018

March

Released 3D laser profile the SR8000 series

August

SinceVision completed Round A financing

2021

March

Released 3D Laser Profiler the SR9000 series

September

SinceVision completed Round B financing

December

Released Laser Displacement Sensor - the SD series

2020

March

Released 3D Laser Profiler the SR5000 series

June

Released Spectral Confocal Displacement Sensor - the SC series

December

Established offices in Chengdu and Beijing, expanding services to the Southwest and North China regions.

2019

March

The East China office was officially established in Kunshan to serve the Yangtze River Delta region.

November

SinceVision completed Round A+ financing

December

Released Laser Displacement Sensor the SG series and the SGI series

2022

April

SinceVision completed Round B+ financing, co-led by MPC and GL Ventures. SinceVision entered the scientific research and defense markets, launching the first generation of High-Speed Camera - the SH6 series.

September

SinceVision obtained "CE Certification," "FCC Certification," "KC Certification," "Precision Certification," "ISO9001 Certification," "ISO14001 Certification," and "Social Accountability Management System Certification."

December

Released Through-Beam Edge Sensor - the SE1 series
Established offices in Dongguan, Hefei, Xi'an, and other regions, covering nationwide services.

2023

June

Released High-Speed Camera the SH3 series and Through-Beam Edge Sensor- the SE2 series

September

SinceVision completed Round C financing, led by the Advanced Manufacturing Fund managed by SDIC Fund Management Co., Ltd., with follow-on investment from GL Ventures. SinceVision was awarded the title of "National new special 'Small Giant' Enterprise."

October

Formally established the International Department, developing markets in Southeast Asia and Europe, with a service network covering the globe.

2024

February

Released 3D Laser Profiler the SRI series

March

Released white light spot photoelectric sensor - the SS1series and Laser Displacement Sensor - the SDC series

June

Released High-Speed Camera-the SH2 series and Spectral Confocal Displacement Sensor- the SCI series

Stable Detection of Color Differences

SinceVision Full-Spectrum sensor is an advanced optical detection equipment designed specifically to meet the needs of industrial automation and quality control. It combines the latest optical and electronic technologies to accurately and quickly identify and distinguish



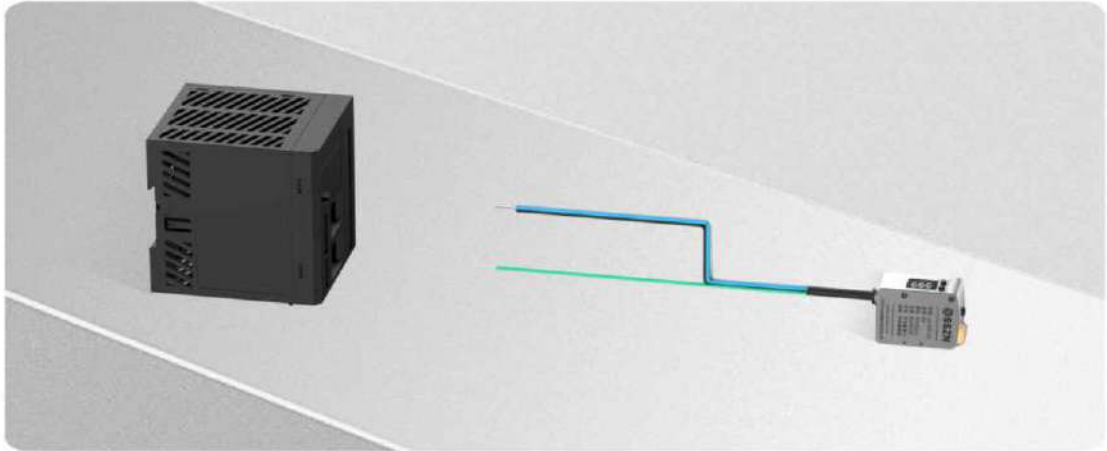
White light spot

The wavelength range is much larger than that of monochromatic light sources, and the automatic adjustment of the luminous power can accurately identify from dark to bright.

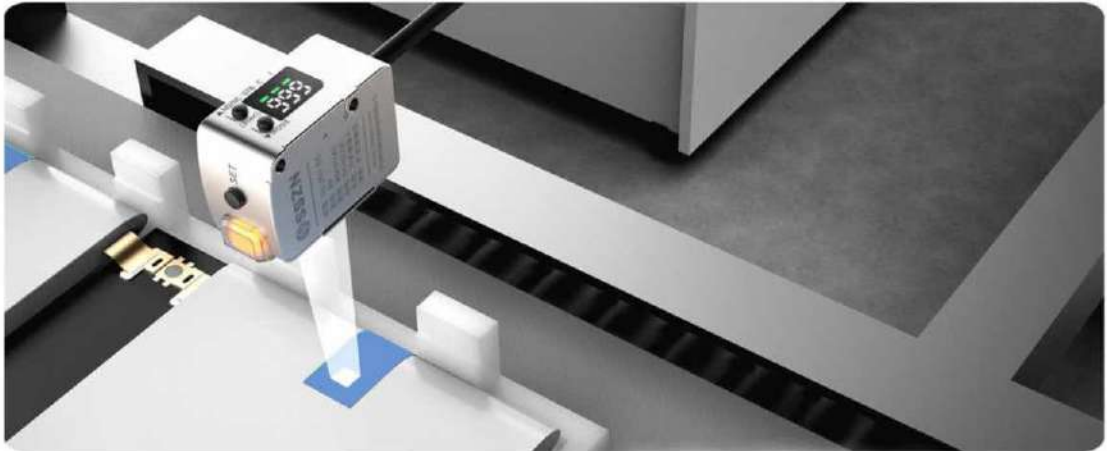


The change in distance and the angle of inclination

can be stably detected, allowing for differences between workpieces, and tuning can be added.



RS485 Communication Can transmit similarity values, with a maximum transmission rate of 10Mbps and a response time as short as 200 μ s, suitable for more motion scenarios.



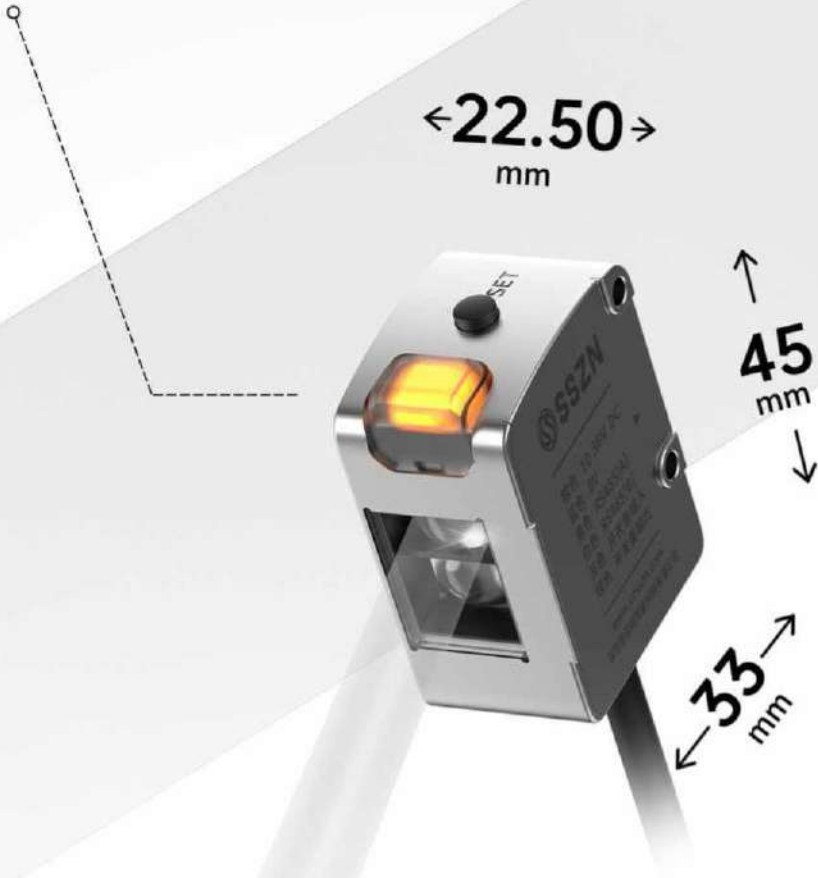
High dynamic range photosensitive elements have ultra-high color resolution and can accurately detect small color differences.



Multiple mode setting functions Multiple mode setting functions match your various application environments, making detection more accurate.

Convenient and reliable appearance structure

Compact design, concise dimension, space saving with aluminum alloy shell, sturdy and durable, free of copper, nickel, and zinc



Clear digital display

makes the detected value clear and readable.



IP67 Waterproof

easily to adapt in damp environments



One button for all

with a teaching button [SET] for easy operation, and a big LED indicator for easy identification in connection or disconnection.



Space-saving design, for tiny workpieces

meets that detection in complex installation environment.

Application Cases



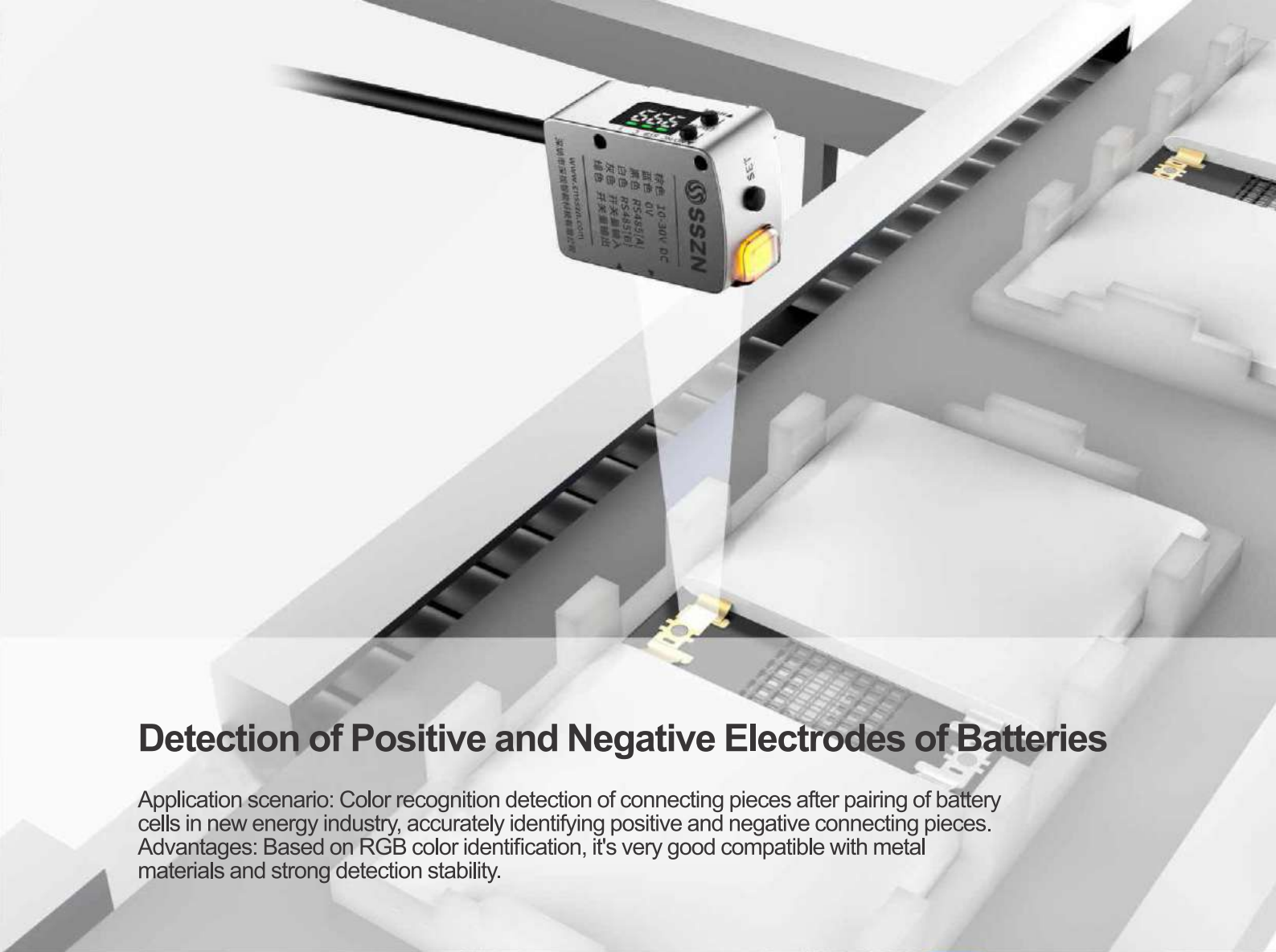
Label Detection for New Energy Industry

Application scenario: detect labels in the winding and die-cutting process of batteries in new energy industry.
Advantages: It has a response time of 200 μ m. High-speed IO and RS485 communication provide data capability in data tracking.



Adhesive Tape Detection

Application scenario: detect tapes of battery cells in new energy industry to prevent battery cell scattering caused by lack of tapes.
Advantages: adhesive tape detection can be set with one click, and the color identification based on RGB principle makes the setting fast and accurate.



Detection of Positive and Negative Electrodes of Batteries

Application scenario: Color recognition detection of connecting pieces after pairing of battery cells in new energy industry, accurately identifying positive and negative connecting pieces.
Advantages: Based on RGB color identification, it's very good compatible with metal materials and strong detection stability.



Detection of Blue Film in Battery Cells

Application scenario: detect blue films of battery cells in the post-process of battery production in new energy industry.
Advantages: Blue film detection can be set with one click, and color identification based on RGB principle makes the setting fast and accurate.

Application Cases



Electrode Positioning Detection for Cutting

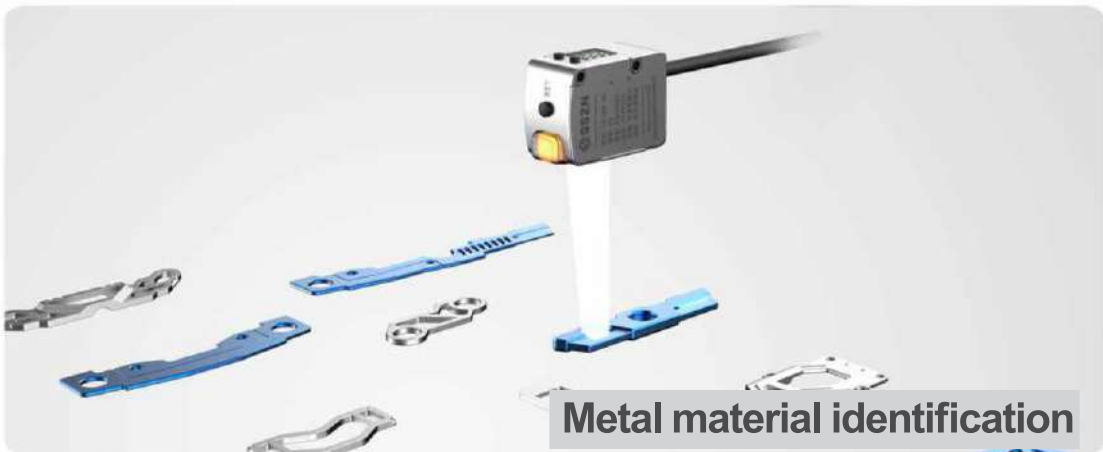
Application scenario: On the winding equipment, to detect colorful adhesive tapes (semi-transparent, light-blue, light-yellow, green) attached to the electrodes of batteries, so that to position and cut the battery electrodes.
Advantages: High resolution, high response frequency.



Product Color Recognition

Application scenario: Identify the colors of incoming products in the production line and accurately classify products of different colors.
Advantage: It can distinguish the product categories by color in the production line. Based on RS485 communication, the operation and wiring are convenient.

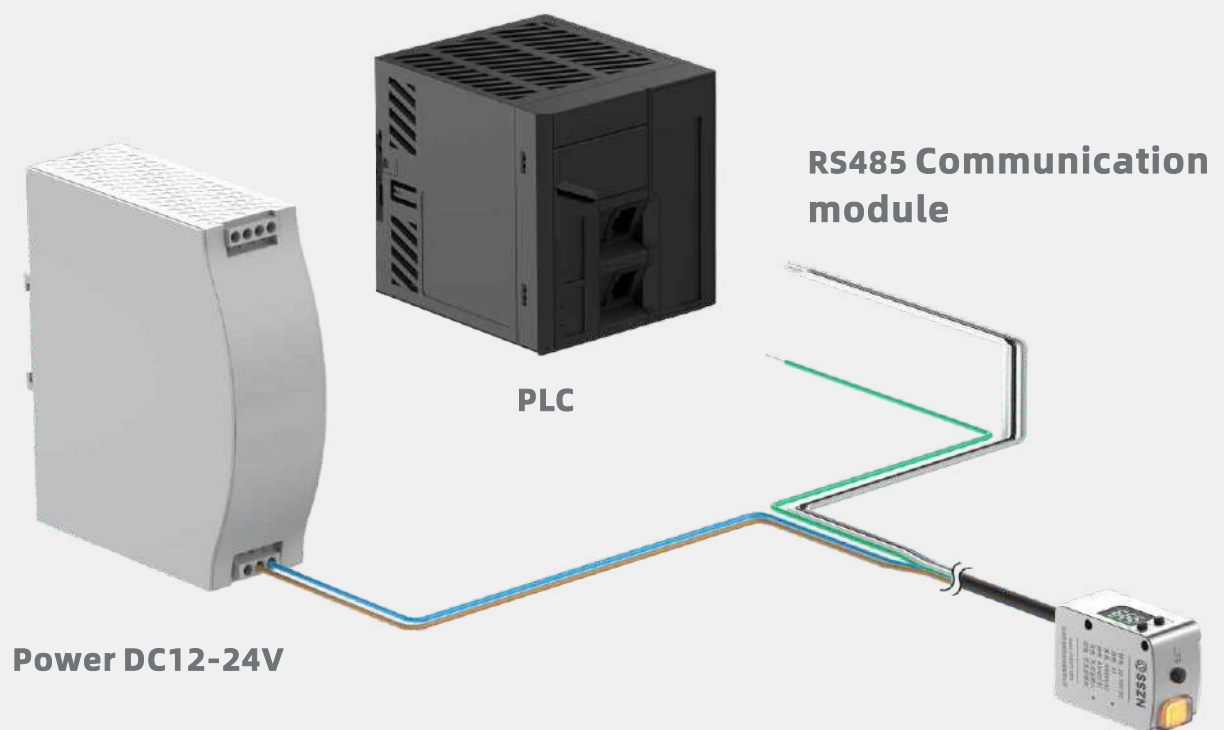
Other Application Cases



System Configuration

System Configuration - RS485 Communication

1. RS485 communication adopts differential signal transmission method, with strong anti-interference ability and high reliability of data transmission.
2. Supports long-distance data transmission (Modbus RTU protocol), suitable for data transmission in industrial control system.
3. Industrial automation and control systems that support multiple devices connecting to the same BUS, suitable for data exchange and communication between multiple devices.
4. Support high data transfer rates, typically reaching around 10Mbps, to meet industrial application requirements.



Main Technical Specifications of Sensors



Colorful label series Measured range Sampling frequency 2 meters cable

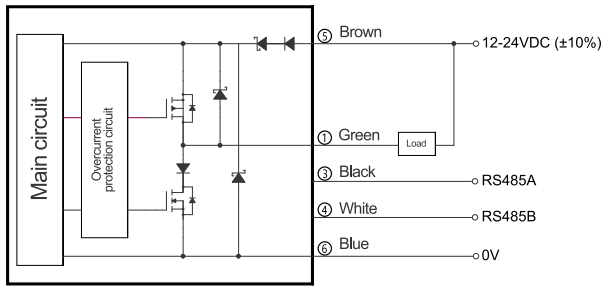
5KHZ

Product naming rules: **SS1-70K5-2M**

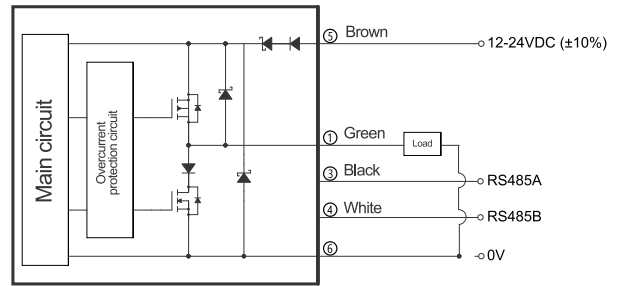
Model		SS1-70K5-2M
		With cable
Measured range		30-70mm
Minimum spot size		4.5 x 4.5mm ² . Measurement range 50mm
Response time		200μs/500μs/1ms/10ms/100ms/500ms, Switchable
Light source		White LED
Interference reduction		Set different frequencies. Support two sets
Timer		Off / Switch on Delay / Switch off Delay / Single time
Communication methods		I/O, RS485
Power supply	Voltage	10~30 VDC , including ±10% ripple (P-P), class 2 or LPS
	Current	≤60 mA, 24 VDC (without load) < 110 mA, 12 VDC (without load)
I/O	Control output	PNP/NPN Open Collector, switchable N.O./N.C. switchable
	External input	Calibration/stop lighting, switchable Short circuit current: NPN:≤1mA / PNP:≤2 mA
Protection circuit		Power reversed connection protection, power surge protection, output overcurrent protection, output surge protection, output reversed connection protection
Environmental resistance	Waterproof	IP67
	Ambient light	Incandescent light: ≤10000 lx; Sunlight: ≤20000 lx
	Ambient humidity	-20 ~ 50°C (No freezing)
	Relative humidity	35 ~ 85%RH (No condensation)
	Shock resistance	1000m/s ² , 6 times each in X, Y, and Z directions
Vibration resistance		10~55Hz, 1.5mm double amplitude for 2 hours each in X, Y, and Z directions
Materials		Shell: Aluminum alloy, with surface free of copper, nickel, and zinc
		LED Indicator cover: PC/PMMA
		Button: PC+ABS
		Lens cover: glass; Display cover plate: PMMA with coating to prevent damage
		Cable: PVC, load temperature 30-50 °C, high voltage test 300V (AC) leakage current not exceeding 2mA, insulation test 300V (DC) insulation resistance not less than 20M Ω, with shielding (maximum length: 10 meters)
		Weight: 107g, including cables

I/O Circuit Diagram and Structural Dimension

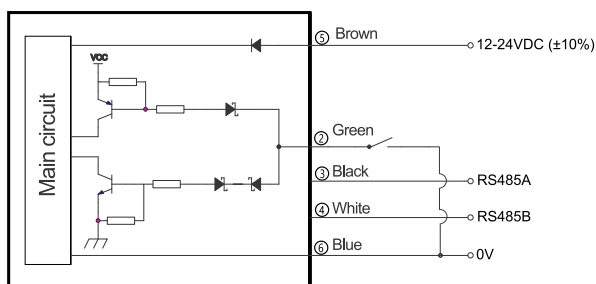
NPN Output



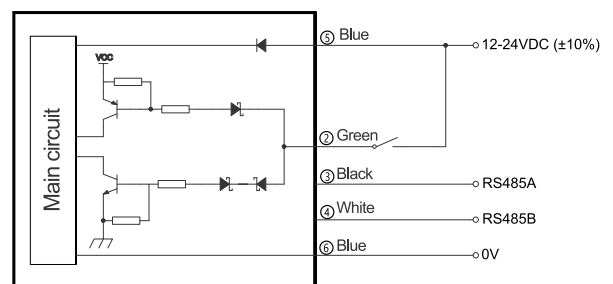
PNP Output



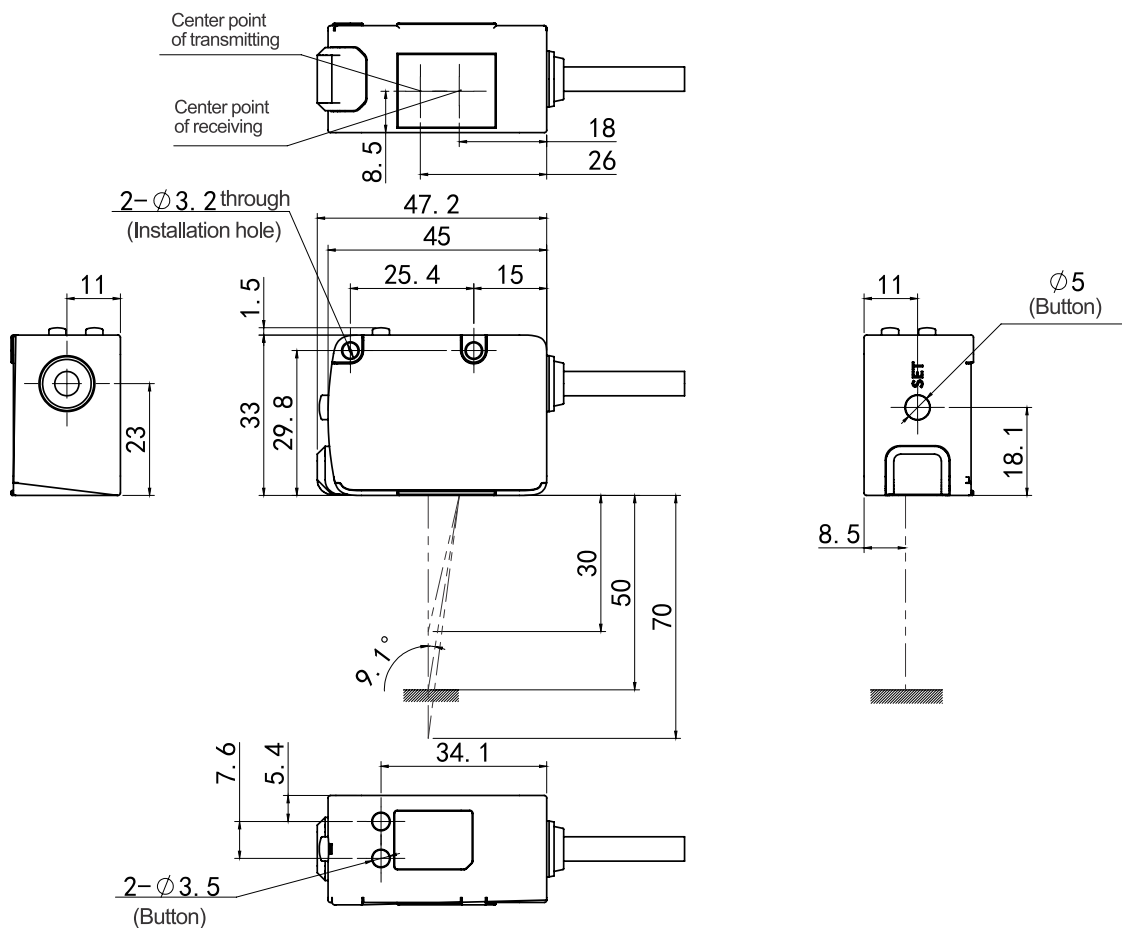
NPN Input



PNP Input



Structural Dimension







SS1 - 70K5 Full-Spectrum Sensor

◎ Service covering:

China: Shenzhen, Suzhou (Kunshan), Shanghai, Wuxi, Beijing, Chengdu, Ningde, Taiwan, Wuhan, Xi'an, Hefei, Dongguan
Overseas: South Korea, Vietnam, Thailand, Malaysia, Singapore

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East China Office:
Room 1305, Building 7, Xiangyu Liang'an Trade Center, No.1588, Chuangye Road, Kunshan, Jiangsu Province, China
Southwest China Office:
Room 604, Block B, Yingchuang International Building, No. 66, Chuangzhi South 1st Road, Pidu District, Chengdu
Northwest China Office:
Room 601, Chuangke Building, Cuihua Road, Yanta District, Xi'an City, Shaanxi Province, China
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SinceVision's
Linked in Account



SinceVision's
YouTube Account

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