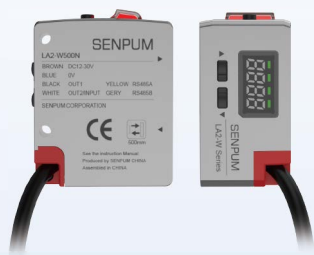
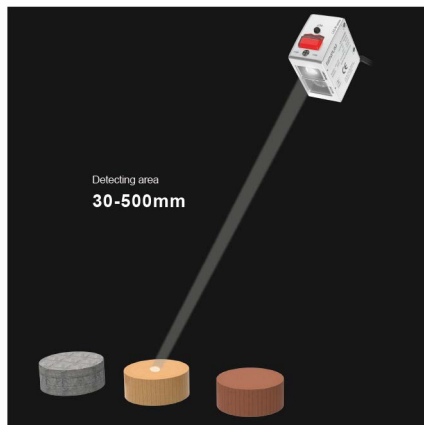


Intelligent white color sensors LA2-W series



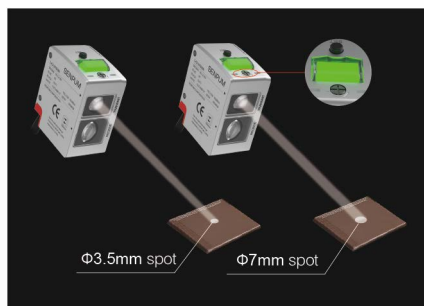
Stable detection even at a distance, superb numerical stability

Stable detection is possible even at long distances thanks to the high-brightness "white light spot".



Adjust the spot size according to requirements, support small workpiece inspection

Adjust the small spot size by turning the knob.



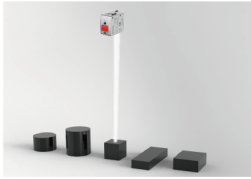
Stable inspection even with of highly reflective workpieces

Stable detection even when there is a change of state or a change of distance

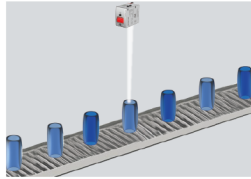
More merits

- Stable detection of appearance (color) differences
- The clear display allows you to check the inspection status at a glance
- Sturdy metal body with zinc cast housing, no protective cover required
- Enclosure protection class IP67 has been realised for use in splash water environments

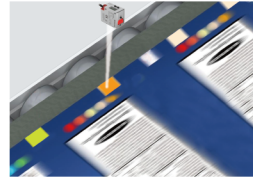
Application



Targets of various shapes



Confirm the correct color difference



Mark detection on labels

Product List

Main body

Appearance	Type	Detection distance	Spot dimension(mm)	Output	Model
	Cable type	 30~500mm	Variable spot Aprox. $\Phi 3.5 \pm 0.2$ mm (at 100 mm) Aprox. $\Phi 9 \pm 0.5$ mm (at 250 mm) Aprox. $\Phi 18 \pm 1$ mm (at 500 mm)	NPN	LA2-W500N
				PNP	LA2-W500P
	Relay type			NPN	LA2-W500CAN
				PNP	LA2-W500CAP

Cable

Appearance	Sensor side	Cable end	Cable length	Model
	M8 6PIN Straight	Loose wire	2m	OW-LAW2000
			5m	OW-LAW5000
			10m	OW-LAW10M
			20m	OW-LAW20M

Bracket

Appearance	Model
	OW-W2001

Color Sensors

LA2-W
LA-W
PC-W
PC-N
PC2-V
LA-F10

Fiber Optic Sensors
Photoelectric Sensors
Color Sensors
Laser Sensors
Inductive Proximity Sensors
Precision Contact Sensors
Area/Safety Light Curtain
Laser Scanners
Digital Contact Sensors
Laser Displacement Sensors
Distance Laser Sensors
Confocal Displacement Sensors
Barcode Scanners
Infrared Temperature Sensors
Digital Pressure Sensors
Gate Magnetic Sensors
Ultrasonic Displacement Sensors
Magnetic Scale
Static Eliminators



LA2-W

Intelligent white color sensors

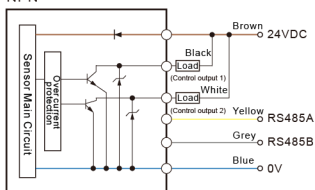
Specs

Type		Cable type	Relay type
Model	NPN	LA2-W500N	LA2-W500CAN
	PNP	LA2-W500P	LA2-W500CAP
Detection distance		30~500mm	
Smallest spot diameter		Variable spot	
		About $\Phi 3.5 \pm 0.2$ mm at 100 mm	
		About $\Phi 9 \pm 0.5$ mm at 250 mm	
		About $\Phi 18 \pm 1$ mm at 500 mm	
Response time		200 μ s / 1ms / 10ms / 100 ms / 500 ms	
Light source		White LED	
Reduced interfering frequencies		Setting different frequencies, up to 2 units**	
Timer off		OFF / Turn-on delay / Disconnect delay / Single trigger	
Power voltage		12-30VDC $\pm 10\%$	
Current consumption		45 mA or less (24V without load)	
		80 mA or less (12V without load)	
Control output**		2 NPN or PNP open collector outputs	
		30 V or less, 50 mA or less,	
		Residual voltage below 2V	
External input**		N.O. / N.C. switchable	
External input**		Calibration / Stop emission switchable	
Protection circuit		Protection against reverse power connection, power supply surge, output over current protection, output short circuit protection	
Enclosure rating		IP65/IP67 (IEC60529)	
Ambient light		Incandescent lamp: under 10000lx Daylight: under 20000lx	
Ambient temperature		-20 to +50°C (no freezing)	
Relative humidity		35 to 85%RH (no condensation)	
Shock resistance		1,000 m/s ² 6 times for each of X,Y,Z axis	
Vibration resistance		10 to 55 Hz double amplitude 1.5 mm X,Y,Z 2H in all directions.	
Cable length (mm)		2000 (loose wire)	160 (plug-in M8)
Material		Aluminum alloy	
Weight		Approx. 170g	

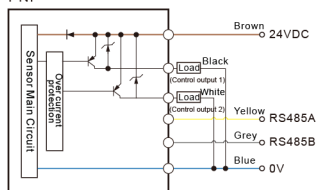
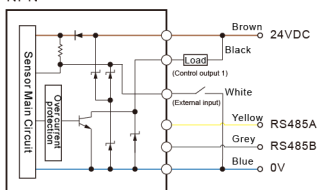
Note: *1. The response time is delayed by approximately 20% for different frequencies set under the Anti-Jamming Function menu.

*2. OUT2 multiplexes the white line with the external input, and when the white line is set to output, there is no external input.

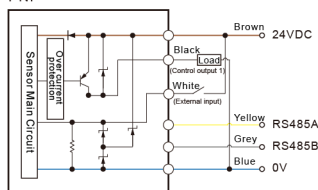
Input/Output Circuit Diagrams

(1) When the white line is the output mode
NPN

PNP

(2) When the white line is external input mode
NPN

PNP

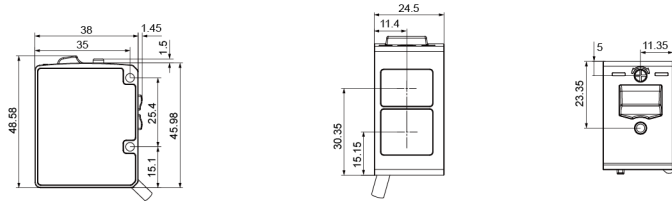


Dimensional Specifications

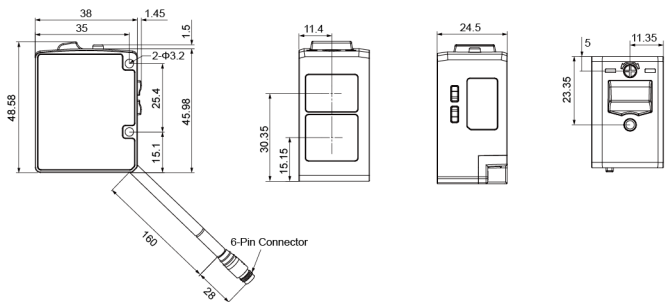
Unit: mm

Main body

LA2-W500N / LA2-W500P



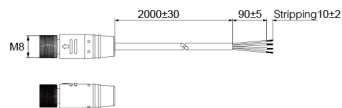
LA2-W500CAN / LA2-W500CAP



Cable

OW-LAW2000 / OW-LAW5000 / OW-LAW10M / OW-LAW20M

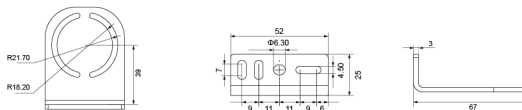
Pin definition



Number	Skin color
①	Brown
②	Blue
③	Black
④	White
⑤	Grey
⑥	Yellow

Bracket

OW-W2001



Color Sensors

LA2-W
LA-W
PC-W
PC-N
PC2-V
LA-F10

Fiber Optic Sensors

Photoelectric Sensors

Color Sensors

Laser Sensors

Inductive Proximity Sensors

Precision Contact Sensors

Area/Safety Light Curtain

Laser Scanners

Digital Contact Sensors

Laser Displacement Sensors

Distance Laser Sensors

Confocal Displacement Sensors

Barcode Scanners

Infrared Temperature Sensors

Digital Pressure Sensors

Gate Magnetic Sensors

Ultrasonic Displacement Sensors

Magnetic Scale

Static Eliminators



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