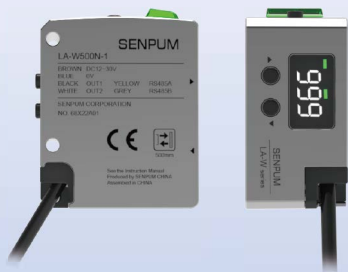
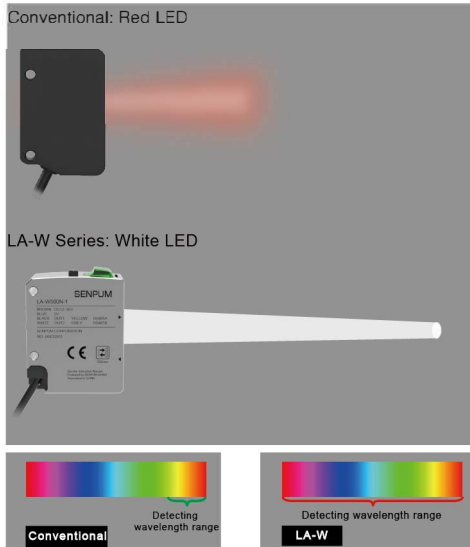


Digital Display White Light Color Sensor LA-W Series



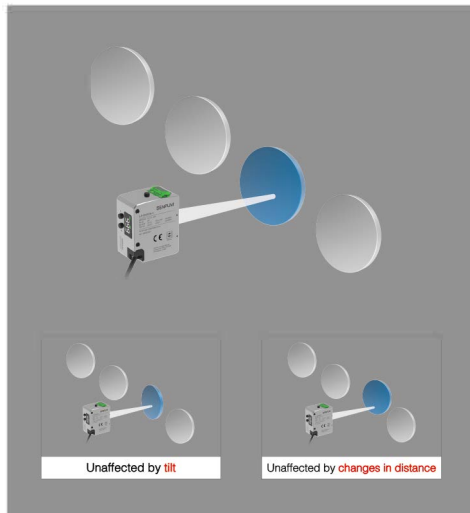
Stable detection of differences in appearance (color)

The LA-W series detects the appearance (color) of the object, and stably detects subtle color differences.

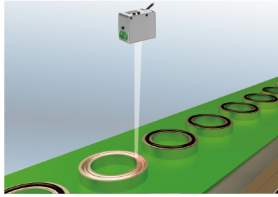


Stable detection even when there is a change of state or a change of distance

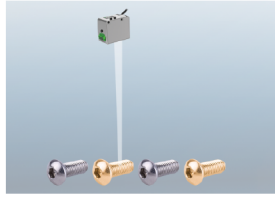
The "white light spot" stably detects differences in appearance (color) even when the object is tilted or the distance changes.



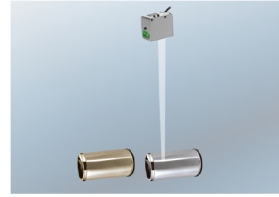
Applications



Detection of rubber implantation



Inspection of product handling/coating verification



Detection of subtle differences in metallic targets

Product List

Main body

Appearance	Type	Detecting distance	Spot dimension(mm)	Output type	Model
	Standard model	30-500mm	Approx. $\Phi 30$ mm (at 500mm)	NPN	LA-W500N
				PNP	LA-W500P
	Small point type	30-70mm	Approx. 1.6 x 2.9 mm (at 50 mm)	NPN	LA-W70N
				PNP	LA-W70P

Slit plate

Appearance	Slit size	Model
	Approx. 110g	OW-W1001-D3
	Approx. 110g	OW-W1001-D5

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



SEN-PUM

0372

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

Color Sensors

LA-W Digital Display White Light Color Sensor

Specs

Type		Reflective	
Model	NPN	Standard model LA-W500N	Small point type LA-W70N
	PNP	LA-W500P	LA-W70P
Detecting distance		30~500mm	30~70mm
Spot dimension	Approx. 30 mm (at 500 mm)		Approx. 2 x 4 mm (at 55 mm)
	Approx. 14mm (at 300mm)		
	Approx. 10mm (at 100mm)		
Light source type		White LED	
Mutual interference prevention function		Setting different frequencies, up to 2 units	
Timer		OFF/On Delay/Off Delay/Single Trigger	
Power voltage		12-30VDC±10%	
Current consumption	30mA or less (24VDC without load)		24mA or less (24VDC without load)
	55mA or less (12VDC without load)		44mA or less (12VDC without load)
Control output		2 NPN or PNP open collector outputs N.O. / N.C. switchable, up to 100mA (24v)	
Control input		Not equipped with	Equipped with
Response time ¹⁾²⁾³⁾		200us / 1ms / 10ms / 100ms / 500ms switching	
Protection circuit		Power reverse connection protection, power surge protection, output short circuit protection.	
Shell protection grade		IP67	
Ambient light		Incandescent: 10000lux max; Daylight: 10000lux max	
Ambient humidity		-20 to 55°C, no condensation -20 to +50°C, no condensation	
Relative humidity		35 to 85% RH, no condensation 35 to 85% RH, no condensation	
Impact resistance		1000m/s², 6 times in each direction X, Z	
Vibration resistance		10~55HZ amplitude 1.5mm, X, Y, Z direction each two hours	
Material		zinc alloy	
Weight		Approx. 155g (including 2m cable)	Approx. 125g (including 2m cable)

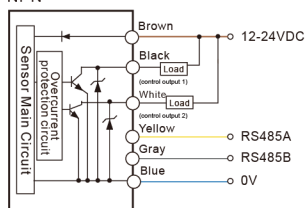
Note: ¹⁾ The response time is delayed by approximately 20% when setting different frequencies;

²⁾ 500us/2.5ms/20ms/200ms/1000ms switching type (when using differential mode);

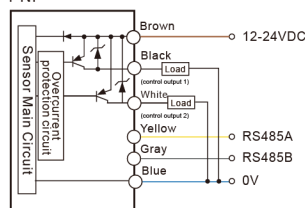
³⁾ 400us/2ms/20ms/200ms/1000ms switching type (when match mode is used).

Input/Output Circuit Diagram

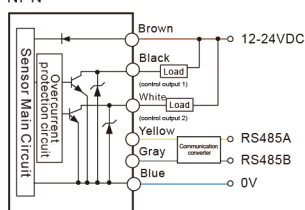
LA-W500N
NPN



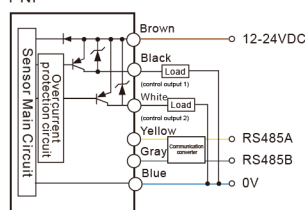
LA-W500P
PNP



LA-W70N
NPN



LA-W70P
PNP



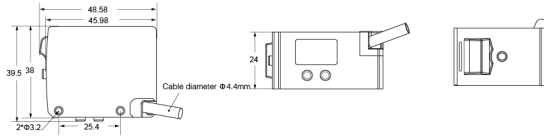
SENPUM
0373

Ask senpum: +86-755-83330055

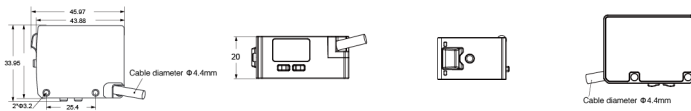
Dimensional Specifications

Unit: mm

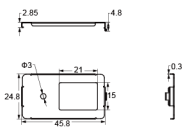
LA-W500N / LA-W500P



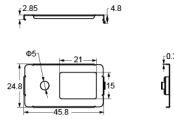
LA-W70N / LA-W70P



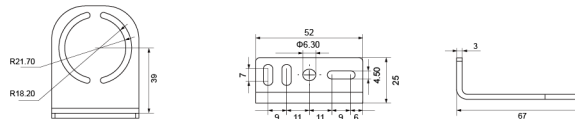
OW-W1001-D3



OW-W1001-D5



OW-W2001



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LA-W
PC-W
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PC2-V
LA-F10

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SENPUM

0374