

Digital display color sensors

PC-W series



High-definition digital display, easy and convenient operation

Push-button operation, compare two colors for by setting, and stably distinguish objects of different colors.



Metal casing, excellent impact resistance

Laser spot and detection distance can be customized on request.



Minimum detection spot 0.5mm

Stable detection of very small targets.

Minimum detection spot

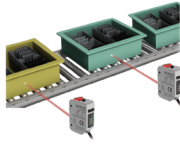
0.5mm



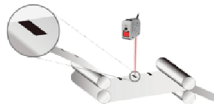
More merits

- Detection range, sensitivity and normally open/closed are adjustable
- High quality red laser light source, easy to identify different color objects
- Ultra-long distance, maximum detection distance is more than 1m
- Linear laser for most shapes of objects

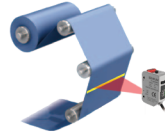
Application



Distinguish between different color material boxes



Color-coded bit detection



Pole roll stop detection

Product List

Type	Appearance	Detection distance(mm)		Spot dimension	Output type	Model
		White non-glossy cardboard	Black non-glossy cardboard			
Standard model		MEGA: 0~3000 FINE: 0~1000 HSPD: 0~700	MEGA: 7~800 FINE: 7~350 HSPD: 7~200	Approx. Φ2mm(at 1000mm)	NPN PNP	PC-WB3000N PC-WB3000P
Small beam spot		MEGA: 0~700 FINE: 0~300 HSPD: 0~200	MEGA: 7~200 FINE: 7~80 HSPD: 7~50	Approx. Φ0.5mm(at 100mm)	NPN PNP	PC-WB700N PC-WB700P
Line spot		MEGA: 0~3000 FINE: 0~1000 HSPD: 0~700	MEGA: 7~800 FINE: 7~350 HSPD: 7~200	Approx. 1.5*120mm(1000mm)	NPN PNP	PC-WS3000N PC-WS3000P

Specs

Type		Reflective					
Model	NPN	Standard model		Small beam spot		Line spot	
	PNP	PC-WB3000N	PC-WB3000P	PC-WB700N	PC-WB700P	PC-WS3000N	PC-WS3000P
Detectable object		White non-glossy cardboard Black non-glossy cardboard		White non-glossy cardboard Black non-glossy cardboard		White non-glossy cardboard Black non-glossy cardboard	
Detecting distance (mm)	MEGA	0~3000	7~800	0~700	7~200	0~3000	7~800
	FINE	0~1000	7~350	0~300	7~80	0~1000	7~350
	HSPD	0~700	7~200	0~200	7~50	0~700	7~200
Spot dimension		Approx. Φ2mm(at 1000mm)		Approx. Φ0.5mm(at 100mm)		Approx. 1.5*120mm(at 1000mm)	
Light source	Type	Red laser					
	Laser class	Class 1 laser product (IEC60825-1)					
Mutual interference prevention function		4 units (when using the anti-tamper function)					
Timer		Delayed shutdown / Turn-on delay / Disconnect delay / Single trigger					
Power voltage		12~30 VDC ±10%, ripple voltage (P-P): max. 10%					
Power consumption		400mW or less (15mA or less at 24V, 25mA or less at 12V)					
Control output		NPN Output max. load current: 100mA; residual voltage: less than 1.5V PNP output max. load current: 100mA; residual voltage: less than 1.5V					
Response time		1ms(fine) / 200us(hspd) / 16ms(mega)					
Protection circuit		Power reverse connection protection, power surge protection, output short circuit protection					
Enclosure rating		IP67(IEC60529)					
Ambient light		Incandescent lamp: max. 10,000lux; sunlight: max. 10,000lux					
Ambient temperature		-20 to +55°C, no freezing					
Relative temperature		35 to 85%RH, no condensation					
Shock resistance		1000 m/s ² , 3 times for each of X, Y, Z axis.					
Vibration resistance		10~55Hz vibration 1.5mm, 2 hours each in X/Y/Z direction.					
Material		Case: aluminum alloy Indicator cover: PC Lens cover: PMMA Button: ABS Cable(2m cable only): PVC					
Weight		Approx.90g(includes 2m of cable)					

Dimensional Specifications

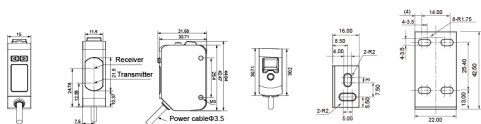
PC-WB3000N/P PC-WB700N/P PC-WS3000/P

N-100

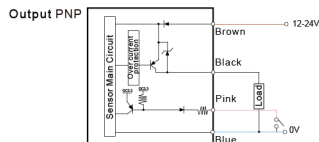
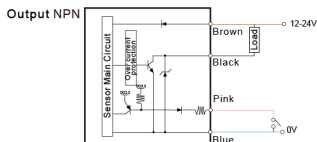
Unit: mm

Mounting Bracket (Option)

N-100



I/O Circuit Connection Diagram



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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