

High-precision digital display laser displacement sensor PDA series



Feature description

- Exquisite appearance and light aluminum housing, easy to mount and dismount
- Convenient operation panel with visualized OLED display to complete all function settings fastly
- 0.5mm diameter light spot to accurately measure very tiny objects.
- Key or remote teach-in to easily set response time for different applications
- Powerful function setting and flexible output way
- Complete shielded desgin, stronger anti-interference perfomance
- IP67 protection degree, able to work in water or dusty environment



Model specification					
RS-485	PDA-CR50DGRM	420mA	PDA-CR50TGIM		

Specifications				
Center distance	50mm	Display	OLED Display(size:14*10.7mm)	
Measuring range	±15mm	Temperature drift	±0.02%F.S./°C	
Full scale(F.S.)	30mm	Indicator	Power indicator:Green LED;Action indicator:Yellow LED	
Supply voltage	RS-485:1030VDC;420mA:1224VDC		Alarm indicator:Yellow LED	
Consumption power	≤700mW	Protection circuit@	Short circuit, reverse polarity, overload protection	
Load current	200mA	Built-in function®	Slave address & Port rate setting;Zero set;Product self-check;Output setting	
Voltage drop	<2.5V		Analog map settings;Parameter query;Single point teach	
Light source	Red laser(650nm);Laser level:Class 2		Window teach;Restore factory settings	
Light spot	Ф0.5mm@50mm	Service environment	Operation temperature:-10+50°C	
Resolution	10um@50mm		Storage temperature:-20+70°C	
Linear accuracy①②	±0.1%F.S.		Ambient temperature:3585%RH(No condensation)	
Repeat accuracy①②③	20um	Anti ambient light	Incandescent light: < 3,000lux	
Output1	RS-485(Support Modbus protocol)	Protection degree	IP67	
	420mA(Load resistance < 390Ω)	Material	Housing:Aluminum;Lens cover:PMMA;Display panel:PC	
Output2	PUSH-PULL/NPN/PNP And NO/NC Settable	Vibration resistance	1055Hz Double amplitude1mm,2H each in X,Y,Z directions	
Distance setting	RS-485:Keypress/RS-485 setting	Impulse resistance	500m/s²(About 50G)3 times each in X,Y,Z directions	
	420mA:Keypress setting	Connection way	RS-485:2m 5pins PVC cable;420mA:2m 4pins PVC cable	
Response time	2ms/16ms/40ms Settable	Accessory	Screw(M4×35mm)×2、Nut×2、Washer×2、Mounting bracket、Operation manual	
Dimension	65*51*23mm			

Remark

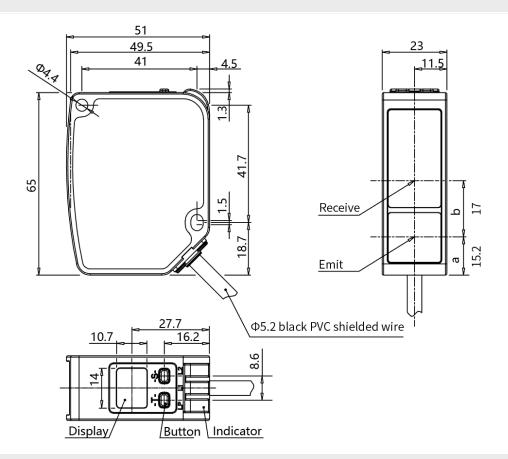
①Test conditions:Standard data at 23 ± 5 °C ;Supply voltage 24VDC;30 minutes' warmup before test;Sampling period 2ms;Average sampling times 100;Standard sensing object 90% white card

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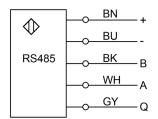
- ②The statistical data follows the 3σ criteria
- ③Repeat accuracy:23 ± 5 ℃ environment,90% reflectivity white card,100 test data results
- (4) Slave address, baud rate setting only for RS-485 series
- ⑤Protecion circuit only for switch output
- ⑥Product operation steps and precautions in "Operation manual"



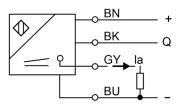
Dimension



Wiring diagram







Analog output 4...20mA

Remark: The sensors are equipped with shielded cables,Q is the switch output.

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