

Laser distance measuring sensor PDB series



Feature description:

- Adoption of TOF principle, not affected by objects' color or material.
- Extended sensing distance, suitable for a variety of applications.
- Favorable detection accuracy and repeat accuracy.
- Infrared laser spot, detection of small objects.

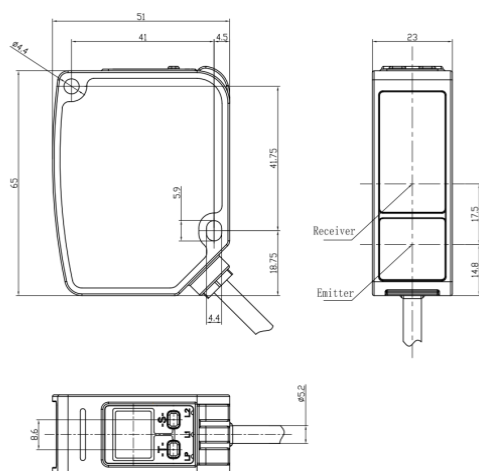


Model specification

RS-485	PDB-CM8DGR	4...20mA	PDB-CM8TGI
		0...10V	PDB-CM8TGU
Specifications			
Measuring range	0.2...8m ^①	Distance setting	RS-485:button/RS-485 setting; 4...20mA/0...10V:button setting
Supply voltage	RS-485:10...30VD;4...20mA/0...10V:12...24VDC	Indicator	Power indicator: Green LED;
Consumption current	≤70mA		Action indicator: Yellow LED, Yellow LED
Load current	50mA	Hysteresis	Less than 2m 3cm; 2% above 2m
Voltage drop	<2.5V	Circuit protection	Short circuit; reverse polarity
Light source	Infrared laser(850nm); Laser level: Class 3R	Built-in function	Button to lock; button to unlock; action point setting;
Working principle	TOF		Output setting; single point teach;
Average optical power	20mW		Window teach mode setting; factory date reset;
Impulse duration	100ns		Slave address, Port rate setting(only for RS-485)
Impulse frequency	10MHZ	Service environment	Operating temperature:-10...+50°C
Testing frequency	100HZ	Anti-ambient light	< 20,000lux
Light spot	RS-485/4...20mA/0...10V: 90*90mm(at 5m meter)	Protection degree	IP67
Resolution	1mm	Material	Housing: ABS; Lens cover: PMMA
Linear accuracy	±1%F.S.②	Vibration resistance	10...55Hz Double amplitude1mm,2H each in X,Y,Z directions
Repeat accuracy	±1%	Impulse resistance	500m/s ² (About 50G) 3 times each in X,Y,Z directions
Output 1	RS-485(Support Modbus protocol)	Connection way	RS-485: 2m 5pins PVC cable;4...20mA: 2m 4pins PVC cable
	4...20mA(Load resistance < 300Ω)		0...10V: 2m 4pins PVC cable
	0...10V(Load resistance > 5K)	Accessories	Screw(M4×35mm)×2, Nut×2, Washer×2,
Output 2	PUSH-PULL/NPN/PNP And NO/NC Settable		Mounting bracket, Operation manual
Dimensions	65mm*51mm*23mm		

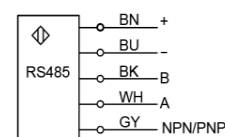
Note: ① Detection object is 90% white card

Dimension

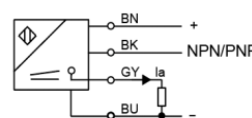


Wiring diagram

Serial communication RS-485



Analog output 4...20mA



Analog output 0...10V

