

## Digital display laser distance measuring 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
- Small 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 design, stronger anti-interference performance
- IP67 protection degree, able to work in water or dusty environment



### Model specification

|        |             |          |             |
|--------|-------------|----------|-------------|
| RS-485 | PDA-CC10DGR | 4...20mA | PDA-CC10TGI |
|--------|-------------|----------|-------------|

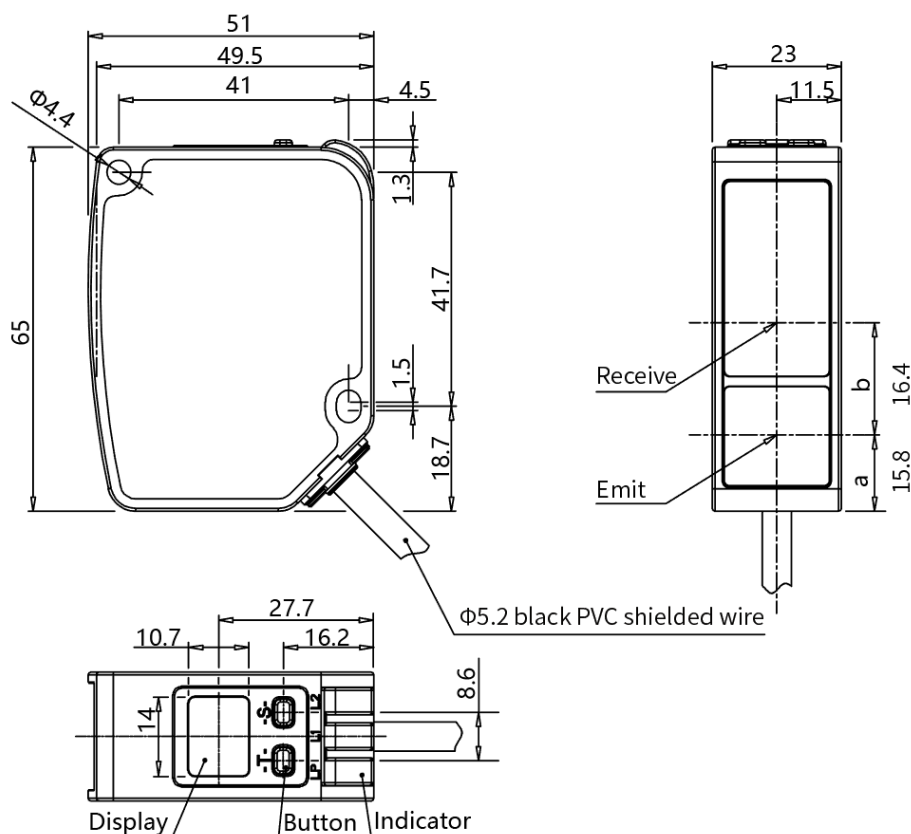
### Specifications

|                    |                                       |                      |                                                                       |
|--------------------|---------------------------------------|----------------------|-----------------------------------------------------------------------|
| Measuring range    | 30...100mm                            | Temperature drift    | ±0.02%F.S./°C                                                         |
| Supply voltage     | RS-485:10...30VDC;4...20mA:12...24VDC | Indicator            | Power indicator:Green LED;Action indicator:Yellow LED                 |
| Consumption power  | ≤700mW                                |                      | Alarm indicator:Yellow LED                                            |
| Load current       | 200mA                                 | Protection circuit④  | Short circuit,reverse polarity,overload protection                    |
| Voltage drop       | <2.5V                                 | Built-in function⑤   | Slave address & Port rate setting ;Average setting;Product self-check |
| Light source       | Red laser(650nm);Laser level:Class 2  |                      | Analog map settings;Output setting;Restore factory settings           |
| Light spot         | 1mm*3mm@100mm                         |                      | Single point teach;Window teach;Parameter query                       |
| Resolution         | 5um@30mm;50um@100mm                   | Service environment  | Operation temperature:-10...+50°C                                     |
| Linear accuracy①②  | RS-485:±0.3%F.S.;4...20mA:±0.4%F.S.   |                      | Storage temperature:-20...+70°C                                       |
| Repeat accuracy①②③ | 10um@30mm;30um@50mm;100um@100mm       |                      | Ambient temperature:35...85%RH(No condensation)                       |
| Output1            | RS-485(Support Modbus protocol)       | Anti ambient light   | Incandescent light: < 3,000lux                                        |
|                    | 4...20mA(Load resistance < 390Ω)      | Protection degree    | IP67                                                                  |
| Output2            | PUSH-PULL/NPN/PNP And NO/NC Settable  | Material             | Housing:Aluminum;Lens cover:PMMA;Display panel: PC                    |
| Distance setting   | RS-485:Keypress/RS-485 setting        | Vibration resistance | 10...55Hz Double amplitude1mm,2H each in X,Y,Z directions             |
|                    | 4...20mA:Keypress setting             | Impulse resistance   | 500m/s²(About 50G)3 times each in X,Y,Z directions                    |
| Response time      | 2ms/16ms/40ms Settable                | Connection way       | RS-485:2m 5pins PVC cable;4...20mA:2m 4pins PVC cable                 |
| Dimension          | 65*51*23mm                            | Accessory            | Screw(M4×35mm)×2、Nut×2、Washer×2、Mounting bracket、Operation manual     |
| Display            | OLED Display(size:14*10.7mm)          |                      |                                                                       |

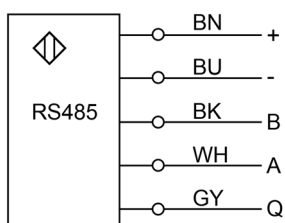
#### Remark:

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

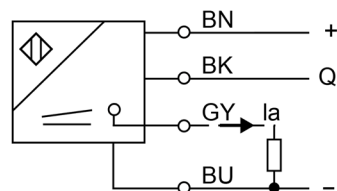
## Dimension



## Wiring diagram



Serial communication RS-485



Analog output 4...20mA

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