Laser distance sensors

Waterproof Laser Distance Sensor, 2 to 400 cm, IP67

Model R01-V1.0

Waterproof laser distance sensor with a 2 cm blind zone and 2-400 cm indoor range, with UART, switch and IIC outputs and IP67 protection.



Range	Blind zone
2–400 cm	2 cm
Protection	**Supply voltage**
IP67	3.3–5 V

Features

- Detection angle approx. 19°
- Typical data output time 30 ms
- 3.3-5 V supply
- Operating temperature -15 to +60 °C
- Temperature compensation built in

Applications

Industrial measurement, Robot obstacle avoidance, Intelligent transportation, Smart home, Security monitoring

Specifications

Blind zone	2 cm
Detection angle	approx. 19°
Typical data output time	30 ms
IP rating	IP67
Operating temperature	-15 to +60 °C
Default baud rate	115200 bps
Operating voltage	3.3–5 V
Communication level	3.3(TTL) V
UART controlled	
Idle current	≤5 mA
UART auto	
Output response time	30–10000 (settable) ms

UART controlled	
Output response time	19–38 (real-time value) ms
Switch output	
Output response time	300–2500 ms
IIC	
Output response time	19–38 ms
UART auto	
Working cycle	30–10000 (settable) ms
UART controlled	
Working cycle	controlled MS
Switch output	
Working cycle	100 ms
Average operating current	≤19 mA
Blind zone	2 CM
Indoor measuring range	2–400 CM
Outdoor measuring range (2~200)	3000LX illuminance CM
Outdoor measuring range (2~90)	15000LX illuminance CM
Accuracy at normal temperature	1CM when distance ≤25CM; S*4%CM when distance ≥25CM
Temperature compensation	Built-in
Φ7.5×100CM white PVC pipe @100CM	
Angle	≈19 °
Dimensions	
Cable length	150±10 mm [in]
Dimension	1.5 [0.06] mm [in]
Dimension	1.2 [0.05] mm [in]
Dimension	6.1 [0.24] mm [in]
Dimension	7.2 [0.28] mm [in]
Dimension	2 [0.08] mm [in]
Dimension	19 [0.75] mm [in]
Dimension	24.5 [0.96] mm [in]
Dimension	14.7 [0.58] mm [in]
Dimensions (mounting cut-out)	

Mounting hole diameter	Ø3.6 mm
Mounting hole diameter	Ø1.7 mm
Window hole diameter	Ø7.4 mm
Hole spacing	19 mm
Dimension	4.5 mm
Dimension	1 mm

Wiring

Connector	White GH1.25x4pin terminal
Wire	UL1571 #28AWG wire, L=150mm

Pin definition

Pin 1	Red
Pin 2	Black
Pin 3	Yellow
Pin 4	Green
Operating voltage	3.3-5.0 V
Output	UART auto / UART controlled / switch (TTL 3.3 V) / IIC
Indoor measuring range	2-400 cm

Ordering and support

Pricing, samples, lead time and custom versions: dwinsales@163.com, +86 181 0280 8901.

Guangzhou Dwin Technology Co., Ltd., 4th Floor, Building 2, No. 4 Xingye Road, Xiaowu Second Industrial Zone, Dongyong Town, Nansha District, Guangzhou, China. Specifications are typical values and may change without notice; confirm critical values with DWIN before design-in. Revision 2026-11.