Ultrasonic distance sensors

Ultrasonic Obstacle-Avoidance Module, 20 cm Blind Zone

Model A24-V1.0

Compact IP67 ultrasonic obstacle-avoidance module for robots with a 20 cm standard blind zone and 20-500 cm range, with four range levels and UART or RS485 output.



Range	Accuracy
50 / 150 / 250 / 350 cm	1+(S*0.5%) cm
Blind zone	**Protection**
20 cm	IP67

Features

- Far range set to 50, 150, 250, 350 cm
- 3.3-12 V supply
- Angle 100±10° horizontal, 65±10° vertical
- Data output as fast as 13 ms
- Black ABS+PC housing

Applications

Robot obstacle avoidance

Specifications

Standard blind zone	20 cm
Range levels	50 / 150 / 250 / 350 cm
IP rating	IP67
Operating temperature	-25 to +65 °C
Default baud rate	115200 bps
Fastest data output time	13 ms

All columns

Operating voltage	3.3–12V

UART auto

Average operating current	≤9mA
Output response time	15–200ms

Working cycle	100–180ms
Output mode	Auto

UART controlled

Standby current	≤5uA
Working cycle	Controlled
Output mode	Controlled

RS485

Average operating current	≤10mA
Output response time	15–750ms

All columns

Blind zone	≤20cm
Planar object measuring range	20–500cm
Power-on working time	≤500ms
Accuracy at room temperature	1+(S*0.5%)cm
Temperature compensation	Yes
Angle (horizontal)	100±10°
Angle (vertical)	65±10°
Housing color/material	Black & ABS+PC

Installation (features image)

Recommended mounting height above smooth ground	25cm
Operating voltage	3.3-12.0 V
Output	UART auto / UART controlled / RS485
Measuring range	20-500 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.