Ultrasonic distance sensors

Ultrasonic Height-Measurement Module, Capacitive Transducer

Model H01-V1.0

Ultrasonic ranging module with a capacitive electrostatic transducer for height measurement, detecting planar objects at 100-8000 mm and human bodies at 100-3000 mm.



Range	Accuracy
100-3000 mm	±(8mm+S*0.2%)
Output	**Frequency**
PWM pulse width	50K±1.0K Hz

Features

- Temperature output and compensation
- PWM, UART controlled or RS485 output
- Accuracy ±(5mm+S*0.2%) or ±(8mm+S*0.2%)
- 5–12 V supply
- Operating temperature -10–50 °C

Applications

Height measurement

Specifications

Human-body detection range	100-3000 mm
PWM	
Operating voltage	5–12 V
Average current	<10 mA
RS485	
Average current	<25 mA
PWM	
Peak current	≤100 mA
Blind zone distance	0–100 mm
Planar object range	100–8000 mm
Output	PWM pulse width
UART	

Output	UART controlled output
PWM processed value	
Output	PWM processed value
RS485	
Output	RS485
PWM	
Working cycle	>70 ms
PWM processed value	
Working cycle	>160 ms
PWM	
Measuring accuracy	±(8mm+S*0.2%)
UART	
Measuring accuracy	±(5mm+S*0.2%)
PWM	
Probe center frequency	50K±1.0K Hz
ESD	±4/±8 KV
Temperature compensation	Not compensated
UART	
Temperature compensation	Compensated
PWM	
Operating temperature	-10–50 °C
Storage temperature	-20–65 °C
Operating humidity	≤80% RH
Storage humidity	≤90% RH
Dimensions	
Outer dimension (square)	50.2±0.2 mm
Hole to centre	25.1±0.3 mm
Mounting hole diameter	ø3.0±0.1 mm
Dimension	3.0±0.1 mm
Dimension	3.2±0.1 mm
Transducer outer diameter	ø42.9±0.1 mm
Transducer diameter	ø38.4±0.2 mm

Dimension (side)	9.5±0.2 mm
Dimension (side)	9.0±0.2 mm
PCB thickness	1.2±0.1 mm

Wiring	
Connector (RS485)	4Pin
Connector (UART)	5Pin
Connector (PWM)	5Pin

Pin definition	
VCC	DC5V~12V power input pin
RX	Trigger input pin
TX	UART/PWM output pin
OUT	Unused pin
GND	Power ground pin
A	RS485 DATA+ pin
B	RS485 DATA- pin
Operating voltage	5-12 V
Output	UART / PWM / PWM processed value / RS485
Measuring range	10-800 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.