

Unit Ultrasonic-IO

SKU:U098-B2



Description

UNIT SONIC IO is a **GPIO** interface ultrasonic range sensor. This module features an RCWL-9620 ultrasonic distance measurement chip with a 16mm probe, which the ranging accuracy can reach **2cm-450cm** (accuracy up to $\pm 2\%$). This sensor determines the distance to a target by measuring time lapses between the transmitting and receiving of the pulse signal, users can directly obtain the distance value through IO control mode. It is ideal to apply in robotics obstacle avoidance, fluid level detection, and other applications that require you to perform measurements.

Note: When the measurement is more than 3.5m, there will be a slight delay in the response of the distance measurement data.

Features

- RCWL-9620
- GPIO communication interface
- Measuring range: 2cm-450cm
- Protective housing
- Built-in temperature compensation, reduce the temperature drift
- Support UIFlow platform

Includes

- 1x Unit Ultrasonic-IO
- 1x HY2.0-4P cable (20cm)

Applications

- Robot Obstacle Avoidance
- Fluid Level Detection
- Sitting Posture Detection

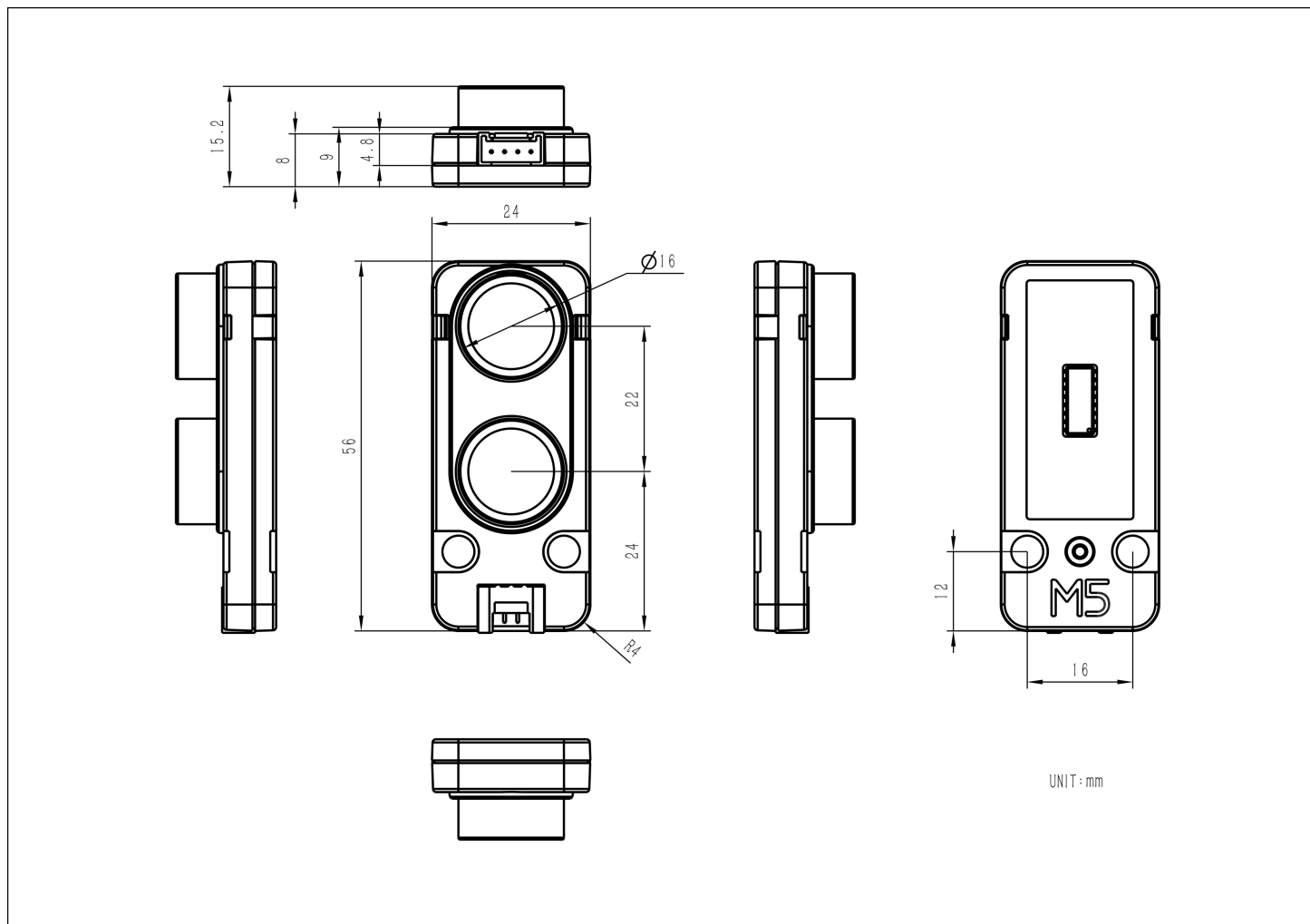
Specifications

Resources	Parameters
Ultrasonic Ranging Single Chip	RCWL-9620
Range	2cm-450cm
Probe Specifications	16mm
Receiving/Transmitting Frequency	40KHz
Receiving sensitivity	-65dB
Pointing angle	60°
Measurement accuracy	±2%
Measurement period	50ms
Working current	3mA
Product Size	56.0 x 24.0 x 15.2mm
Product Weight	11.8g
Package Size	75.0 x 46.0 x 36.0mm
Gross Weight	27.0g

ピンマップ

M5Core (PORT B)	G26	G32	5V	GND
UNIT SONIC IO	TRIG	ECHO	VCC	GND

Model Size



構造

- [Unit Ultrasonic-IO 構造ファイル](#)

データシート

- [RCWL-9620 Datasheet](#)

ソフトウェア

Arduino

- [M5Unit-Sonic with M5Atom](#)
- [M5Unit-Sonic with M5Core](#)
- [M5Unit-Sonic with M5Core2](#)

- [M5Unit-Sonic with M5StickC](#)
- [M5Unit-Sonic with M5StickCPlus](#)

UiFlow



[UiFlow1 Unit sonic_io Docs](#)

How to use Unit sonic_io and related API instructions in the UiFlow1

UiFlow2

- [Unit Ultrasonic-IO UiFlow2 Docs](#)

| 動画

- Ultrasonic trolley obstacle avoidance

[sonic_i2c_gpio_video.mp4](#)