

## SRF01 ultrasonic sensor

# SKU:SEN0004









#### INTRODUCTION

It is a tiny, with impressive performance single transducer sensor. The SRF01 Ultrasonic Range Finder uses Devantech's 2nd generation AutoTune technology that allows ranging from 6 meters (19.7') all the way down to zero on a single transducer sonar module.

Connect up to 16 SRF01 modules to a single microcontroller line, using a simple (3.3~5V tolerant) TTL serial networking protocol of a "Break", 2-byte sensor address, and the command. The SRF01 at that address will respond appropriately (check the resources).

Two different operating modes are available when using the SRF01. The standard mode is "Advanced Mode", allowing ranging all the way down to the transducer (0cm). This requires the SRF01 taking 5 readings out to a range of 30cm or more and setting an internal calibration bit. "Standard Mode" does not require this calibration routine, but decreases the effective range to 18cm to 6m (7" to 19.7')

To make mounting a snap, a rubber grommet is supplied to mount the SRF01, which can secure the sensor in a panel no thicker than 1.7mm (0.067").

### Supplied with Mounting Grommet.

3-pin JST cable is not included.

### **SPECIFICATION**

- Voltage 3.3v to 12v
- Current 25mA Ranging. 11mA Standby. 55uA Sleep.
- Frequency 40KHz
- Range 18cm(7 in) to 600cm (236 in)(Industrial spec', no calibration required).
- Range 0cm to 600cm (236 in)(Hobby spec' after auto-calibration).
- Connection One Pin Serial Bus @ 9600 baud.
- Up to 16 SRF01's connected to a single pin on your controller.
- Units Range reported in cm or inches.
- Very light weight, just 2.7gm

### **SHIPPING LIST**

• SRF01 ultrasonic sensor x1