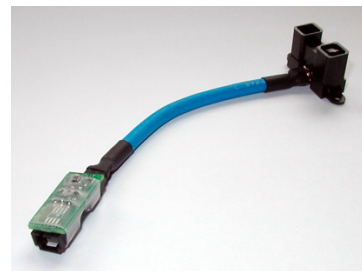


# T300A Infrared Distance Sensor

## Technical Specifications



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### Physical Attributes

The T300A is a two part sensor. The IR Unit transmits and receives infrared light, while the Conditioner is an external circuit that treats the signal coming from the IR Unit to make it ready for use by a sensor interface.

Dimensions [IR Unit]	1.75" (44.5mm) x 3/4" (18.8 mm) x Z" (21.6mm)
Dimensions [Conditioner]	1.25" (30mm) x 7/8" (16 mm) x 3/8" (10mm)
Solder Mask Color	Green
Encasement	Protective Heatshrink (clear)
Temperature Range	-30°C to 75°C (-21°F to 160°F)

### Sensing Specifications

Description	Infrared Distance Measuring Sensor (GP2Y0A02YK) manufactured by Sharp Corporation.
Physical Range	Approximately 20-150cm (8-60 inches)
Response Time	Approximately 40ms

### Electrical Specifications

Voltage Source	5 Volts
Minimum Current Source	80 mA
Voltage Returned by Sensor	Industry Standard 0.25 Volts to 4.75 Volts, fully conditioned and buffered.
Connector Layout (Pin 1 indicated with arrow)	Pin 1: Ground Pin 2: Sensor Output Pin 3: 5 Volts (power supply)

### Application Examples

- Sensing distance to an object.

### Application Notes

- The field of vision for the sensor is very narrow. The object being sensed must be directly in front of the sensor. Objects slightly off to one side or the other are invisible to the sensor.
- Because this sensor is using infrared wavelengths of light, it is immune to ambient/visible light.