

Grove - Digital Infrared Temperature Sensor



DESCRIPTION

FEATURES

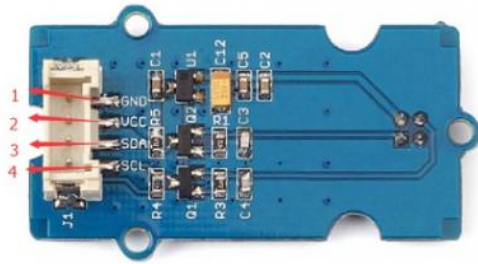
- Wide Temperature Detecting Range
 - 40 to 85°C for sensor temperature
 - 40 to 115°C for object temperature
- High accuracy of 1°C over wide temperature
- Measurement resolution of 0.02°C
- Embedded emissivity compensation
- Power saving mode

The Digital Infrared temperature sensor is a non-contact temperature measurement module which bases on MLX90615. Both the IR sensitive thermopile detector chip and the signal conditioning chip are integrated in the same package. This module communicates with Arduino using SMBus, up to 127 sensors can be read via common 2 wires. Thanks to the module's low noise amplifier, 16-bit ADC and powerful DSP unit, it can achieved a high accuracy of 1°C over wide temperature range and a high measurement resolution of 0.02°C.

Specification

Item	Min	Typical	Max	Unit
Voltage	2.6	3	3.4	V
Current		1.4	1.5	mA
Ambient Temperature Range		-40 - 85		°C
Object Temperature Range		-40 - 115		°C
Dimension		20x40x9.6		mm

Interface Function



Pin Numbler	Name	Type	Function Description
1	GND	-	Signal ground
2	VCC	in	Positive Power Supply Input Terminal (3.3V or 5V)
3	SDA	in/out	I2C data input/output
4	SCL	in	I2C CLK