

Temperature Sensor Module GY-906

MLX-90614



Features:

The GY-906 MLX90614 infrared thermometer module offers high-precision, non-contact temperature measurement over a wide range from -70°C to +380°C. It integrates the Melexis MLX90614 sensor, featuring a 17-bit ADC, DSP processing, and a digital I2C/SMBus interface for easy integration with microcontrollers such as Arduino. It supports multiple operation modes including I2C communication, PWM continuous output, and thermal switch mode. The module includes a 662K voltage regulator for 3.3V/5V compatibility and a built-in optical filter to eliminate interference from visible and near-infrared light. Commonly used in applications such as HVAC monitoring, industrial automation, thermal relay systems, and medical thermometers.

Specifications	
Chipset	MLX90614
Power Supply	3V–5V DC (max 6V)
Communication	I2C / SMBus
Object Temperature Range	-70°C to +380°C
Sensor Temperature Range	-40°C to +125°C
Accuracy	±0.5°C (0°C–50°C)
Resolution	0.02°C
Field of View	90°
Output Modes	I2C, PWM, Thermal Switch
Regulator	662K 3.3V LDO
Output Drive Capability	25mA
Connection Header	4-pin (VIN, GND, SCL, SDA)
Usage	Non-contact thermal measurement in industrial, automotive, and healthcare systems

Pinouts:

Pin Name	Type	Description
VIN	Power	3.3V or 5V input power
GND	Ground	Ground connection
SCL	Input	I2C Clock Line
SDA	Input/Output	I2C Data Line (also PWM Output)



SDA

SCL

GND

VIN

Wiring:

