

Melexis

INSPIRED ENGINEERING

MLX90615

INFRARED

TEMPERATURE
SENSOR



Pit viper snakes have a cool heat sensing system to find prey in the dark. The pit is a special organ that senses body heats from animals and gives an infrared heat vision which accurately judges distance and size.

ULTRA SMALL, INTELLIGENT NON CONTACT INFRARED THERMOMETER

The MLX90615 is an intelligent InfraRed thermometer, with a diameter of only 4.7mm (0.185") and height of 2.7mm (0.106"). Its small size is excellent in those applications where "size does matter". Just like in its bigger brother the MLX90614, the signal processing chip integrated in the Transistor Outline (TO-46) package offers the advantages of a plug and play, fully calibrated thermometer, fitting right into your application.

FEATURES & BENEFITS

- ✓ Easy to use
 - Factory calibrated IR thermometer with linear digital output
 - Small size TO-46 can, easy to integrate
 - Streamlined production
 - 2.4-3.3V supply voltage with power saving mode for battery operation
 - SMBus interface or PWM temperature output
- ✓ Performance
 - Standard calibration in wide temperature range: ambient temperature from -20 to 85°C object temperature from -20 to 115°C
 - $\pm 0.2^{\circ}\text{C}$ accuracy in body temperature range
 - 0.02°C readout resolution

- ✓ Quality
 - High reliability and long-term stability
 - Traceability through unique ID number in memory
 - RoHS compliant

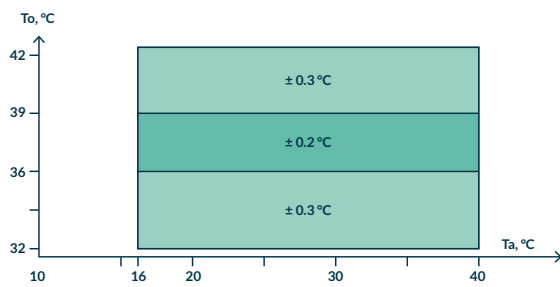


APPLICATIONS

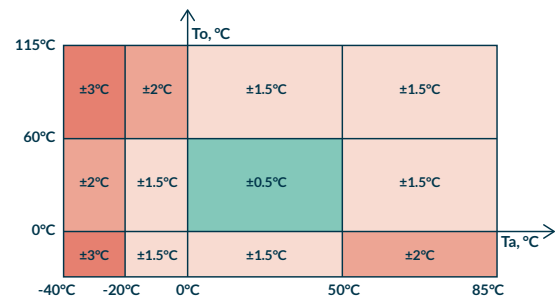
- ✓ **Ear thermometer:** fast and easy fever measurement;
- ✓ **Body temperature monitoring:** monitoring the temperature of patients during operation or people in intense physical effort (athletes, firefighters, soldiers).
- ✓ **Home healthcare:** measuring temperature in home use health equipment, 24/24 body temperature tracking;
- ✓ **Mobile telephones:** The MLX90615 is so small and easy to integrate, it can easily fit into handheld devices;



MLX90615 MEDICAL TEMPERATURE ACCURACY



MLX90615 STANDARD TEMPERATURE ACCURACY



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