



MEDICAL-GRADE TEMPERATURE SENSORS

Medical infrared temperature sensors are accurate and allow non-contact measurement for fast operation. These are key features in situations where people need to be screened for fever symptoms in an efficient and precise way. From complex calibration to medical standards to

fulfill, manufacturers face multiple challenges in the design as well as in the assembly of such a medical devices. Depending on the specific needs of the customer, Melexis has several solutions available.



Melexis IC solutions for temperature sensing

Aiming to facilitate the integration of the IC, Melexis not only offers sensors with digital output but also factory-calibrated infrared temperature ICs, allowing medical device manufacturers to design and build medical-grade infrared body thermometers in a fast and simple way in line with medical standards, meeting the medical temperature accuracy of $\pm 0.2^\circ\text{C}$.

Depending on the specific needs of the customer, Melexis has several solutions available.

Thanks to its tiny QFN package size (3 x 3 x 1 mm), the **MLX90632** is well suited for applications such as contactless ear thermometers or any wearable or portable applications. Miniaturized far-infrared sensors are typically sensitive to thermal interferences, however the innovative **MLX90632SLD-DCB-000** mitigates this effect with smart compensation algorithms.

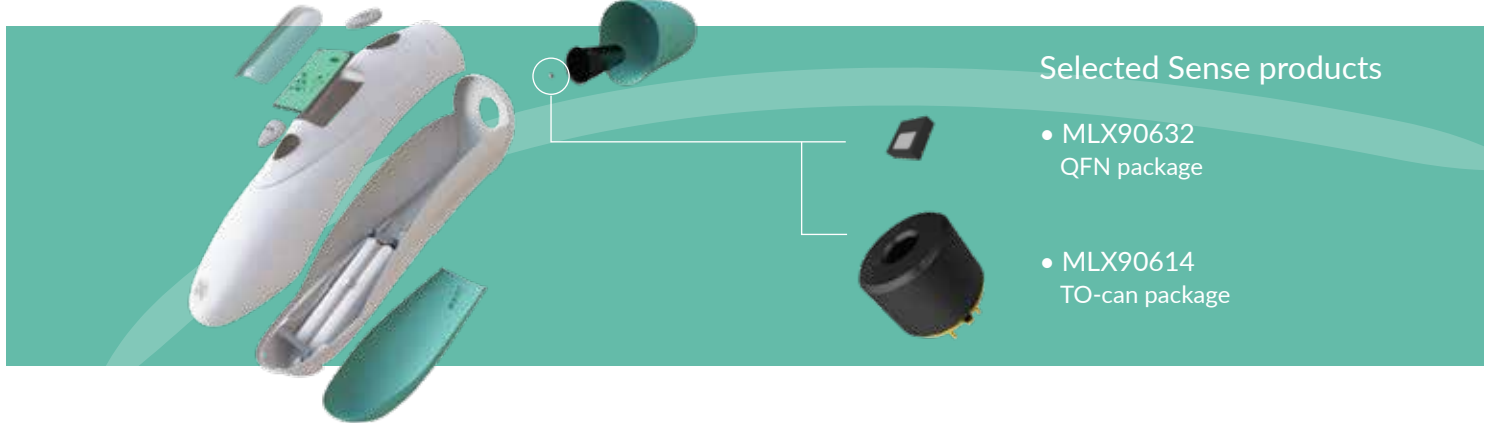
When a narrower field of view (FoV) is required, for larger distance between the sensor and the object under a test, the popular **MLX90614ESF-DCC-000** in TO-CAN package is the preferred choice with its 35° field of view.

The **MLX90614ESF-DCI-000** variant has a mere 5° field of view and therefore allows maximum detection distance. This feature is useful in systems such as automated fever screening of children at school or employees at the factory gate.



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Application products

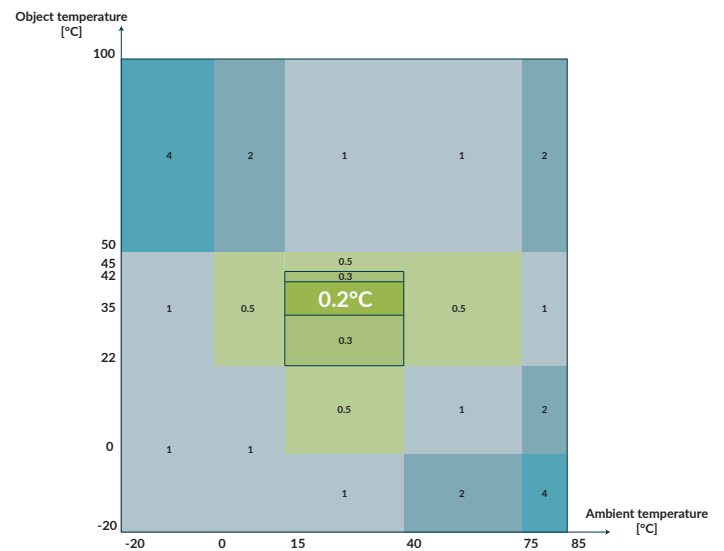


Selected Sense products

- MLX90632
QFN package
- MLX90614
TO-can package

Other applications

Melexis IC medical accuracy table



Melexis Sense

MLX90632SLD-DCB-000

- Tiny 3 x 3 x 1 mm QFN package

MLX90614ESF-DCC-000

- FoV 35° in TO-can package

MLX90614ESF-DCI-000

- FoV 5° in TO-can package

- accurate and stable operation in thermally challenging environments

- factory calibrated with an accuracy of ± 0.2 °C in the human body temperature range

- digital output

More about our products and solutions

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