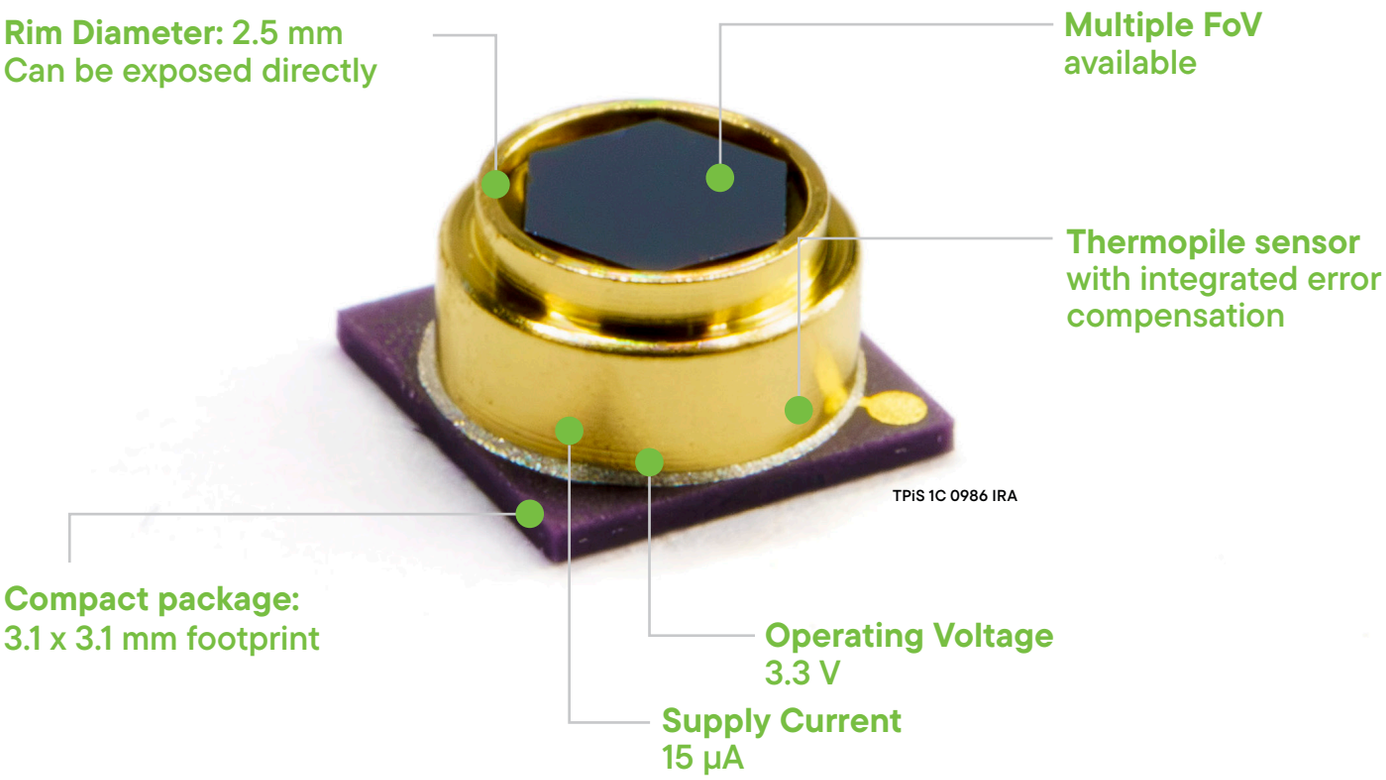
CaliPile™ Mini

TPiS 1C 0986 IRA and TPiS 1C 0987

Miniature Calibrated Thermopile Sensor for Temperature and Occupancy Monitoring



Designed for Accuracy. Built for Efficiency.

The CaliPile™ Mini is the most compact thermopile sensor within the Excelitas CaliPile product family capable of motion detection, presence monitoring and remote temperature measurement. Advanced technology suppresses potential error signals that may arise from thermal shock or changing environmental conditions and allows the sensor to be directly exposed to the outside. With its compact footprint, the CaliPile™ Mini is suited for wearables where you can monitor both occupancy and the user's temperature in order to limit the battery consumption.

Features

- Integrated compensation of errors from non-radiation heat flows
- I²C interface, hardware-configurable address
- Wake-up sensor with interrupt functions for presence motion, over-temperature & more

Applications

- IoT
- Connected Devices
- Wearables (Smart Watch, Glasses, Rings, etc.)

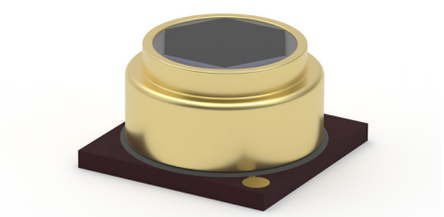
excelitas®

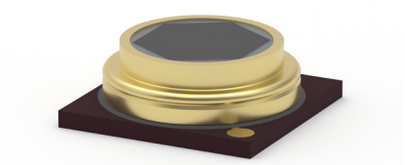
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Tailored Performance for Different Integration Needs

The CaliPile™ Mini products offer two ultra-low-power thermopile sensors with identical multi-function capabilities for temperature, presence, and motion sensing. While both devices share the same digital architecture, they are optimized for different application requirements.





TYPE	TPiS 1C 0986 IRA	TPiS 1C 0987
Package Size	3.1 x 3.1 x 1.7 mm	3.1 x 3.1 x 1.2 mm
Optical Design	Integrated reflective optics	Direct aperture design
Thermopile Sensitivty	20 counts/K	30 counts/K
NETD	70 mK	60 mK
Maximum Object Temperature	450 °C	400 °C
Medical-Grade Accuracy	Standard Feature	Optional
Field of View	58 °	80 °
Customization options available on request		

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