

# Thermal Infrared Cameras for Smartphones

*From the inventor of the Thermoscan Ear Thermometer*

## New Features for a Mobile Phone

*The embedded infrared (IR) cameras*

Infrared non-contact thermometer instantly measures body temperature and detects fever. Clinical accuracy.

Measurement of surface temperature of any object at distances from few centimeters to infinity (*IR camera angle of view of 15° defines the measurement spot size at a particular distance*)

Thermal imaging camera - see objects in total darkness or heat distribution over a surface.

No comparable products on the market – a great differentiator for a smartphone industry

Minimal incremental cost

Quick time to market

Easy to use – integrated sensor outputs the processed digital signal to the App.

Instant response (<1 s)

Computes the body inner temperature (IR thermometer in Medical mode)

Clinical Accuracy: meets ISO 80601-2-56 standard for medical thermometers

Shows thermal image on a smartphone display (multi-pixel IR camera)

Small (2 mm) infrared (IR) focusing lens is located next to the digital camera lens.

Measures temperatures of inanimate objects (cooking, buildings, machinery, circuit boards, etc.)

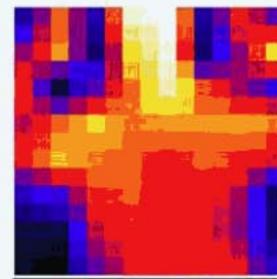
Very broad customer base: parents, medical providers, technicians, machinists, builders, students, scientists, production technicians, military and police personnel, and many others.



## Your next smartphone will stand out of competition with this technology

Patented Technology – (U.S. Patent No. 8,275,413) and international patents are on file. Broad IP claims cover mobile communication devices capable of receiving and processing electromagnetic radiation in multiple spectral ranges. These include EMF radiation from high voltage power lines, microwave ovens, Wi-Fi routers, etc.

The patents also cover measurement of the UV light intensity for beachgoers to monitor sun exposure or select the suntan lotion. In the mid- and far-infrared (IR) ranges it allows a non-contact measurement of temperature and thermal imaging (night vision).



Thermal image of a man holding his arms up. Taken with 8x8 pixel ultra-miniature IR camera with the interpolation processing to enhance resolution

