

# THERMAL EXPERT™

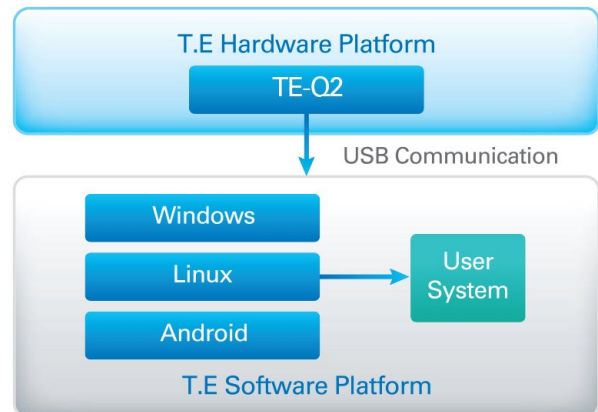
## Uncooled Infrared Engine

TE-Q2

- Thermal Expert for third-party developer is composed of hardware and software.



5.7mm Lens(default)



## Description

- High resolution : 384 x 288 (12 $\mu$ m pitch)
- High sensitivity :  $\leq 55\text{mK}@f/1.0$

## Features

- Temperature measurement for whole pixels
- Small sized hardware platform
- Various software platforms
- Shutter

## T.E. Hardware Platform

- Hardware Platform has basic functions such as detector control, A/D conversion, USB communication and calibration data storage (in flash memory).
- The algorithm is used to stabilize the output characteristics of the detector against the ambient temperature.

## T.E. Software Platform

- Software Platform provides the calculation such as detector non-uniformity correction, dead pixel correction and temperature calculation in user system.
- The Android, Windows and Linux platforms are available. Each provides the output of thermal data and temperature data.

## Product Mix



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## Specifications

Array format	384 x 288
Pixel pitch	12 $\mu$ m
Wavelength Band	8~14 $\mu$ m (Longwave Infrared)
Frame rate	< 9 Hz
Time to first image	< 10sec
Power consumption	$\leq$ 1W
Weight	< 45g
Dimensions(W x H x D)	34 x 38 x 21.5 mm
Interface	USB 2.0
Type of lens	5.7mm F1.1
FOV[°]	45.1°(H) x 34.2°(V) -54.7°(D)
<b>Temperature Measurement - Fever Scan</b>	
Scene temperature	30°C~ 40°C
Accuracy	$\pm$ 1°C
Operation temperature	0°C~ 50°C
<b>Temperature Measurement - Industry</b>	
Scene temperature	-10°C~ 150°C
Accuracy	$\pm$ 3°C or $\pm$ 3%
Operation temperature	-10°C~ 50°C

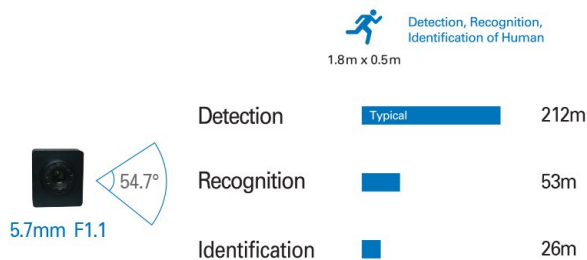
## Composition



## Dimensions



## Range Performance



## Thermal Images

