# THERMAL EXPERT™

### **Uncooled Infrared Engine**

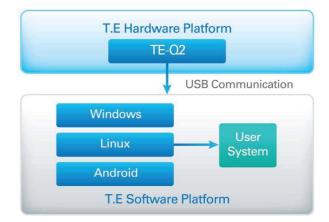
TE-Q2

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



# **Description**

- High resolution:  $384 \times 288 (12\mu\text{m} \text{ pitch})$ - 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 <i>μ</i> m
Wavelength Band	8~14 μm (Longwave Infrared)
Frame rate	< 9 Hz
Time to first image	< 10sec
Power consumption	≤1W
Weight	< 45g
Dimensions (W x H x D)	34 x 38 x 21.5 mm
Interface	USB 2.0
Type of lens	5.7 <sub>mm</sub> F1.1
FOV[°]	45.1°(H) × 34.2°(V) -54.7°(D)

Temperature Measurement - Fever Scan	
Scene temperature	30°C∼40°C
Accuracy	±1℃
Operation temperature	0°C∼50°C
Temperature Measurement - Industry	

Temperature Measurement - Industry	
Scene temperature	-10℃~ 150℃
Accuracy	±3℃ or ±3%
Operation temperature	-10°C ~ 50°C

### **Composition**



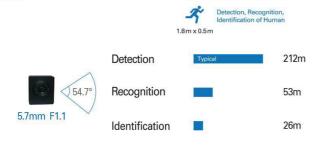




# **Dimensions**

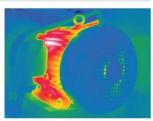


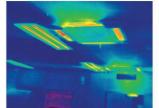
### **Range Performance**

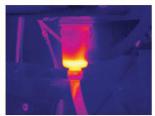


# Thermal Images









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