

# THERMAL EXPERT™

Mobile Infrared Camera

TE-Q1



6.8 mm Lens  
**Thermal Expert**  
SCENE RANGE  
-10°C to 150°C



13 mm Lens  
**Thermal Expert PLUS**  
SCENE RANGE  
-10°C to 120°C



6.8 mm Lens  
**Thermal Expert PRO**  
SCENE RANGE  
-10°C to 250°C

## Description

### • High performance

- High resolution : 384 x 288 (17µm pitch)
- High sensitivity : ≤ 50 mK@ f/1.0, ≤ 80 mK@ f/1.3

## THERMAL EXPERT™ for Android

- Color palettes (12 color maps)
- Storage images (IR, visible with snapshot and video)
- Digital zooming (384 x 288, 320 x 240, 240 x 160, 160 x 120)
- Image view with visible (50:50, Twin, Overlay, Floating)
- Temperature Measurement (Alarm, Min/Max, Point/Line/Rectangle/Circle profile)
- Report (Generate pdf report)
- Level and Span function (High Definition)



Level and Span

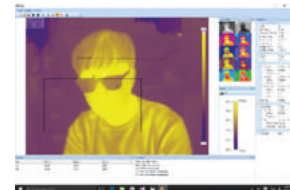


## Features

- Temperature measurement for whole pixels
- Convenient image view functions with infrared and visible
- Easy graphical user interface (digital zooming, color Palette.)
- Interchangeable Lens

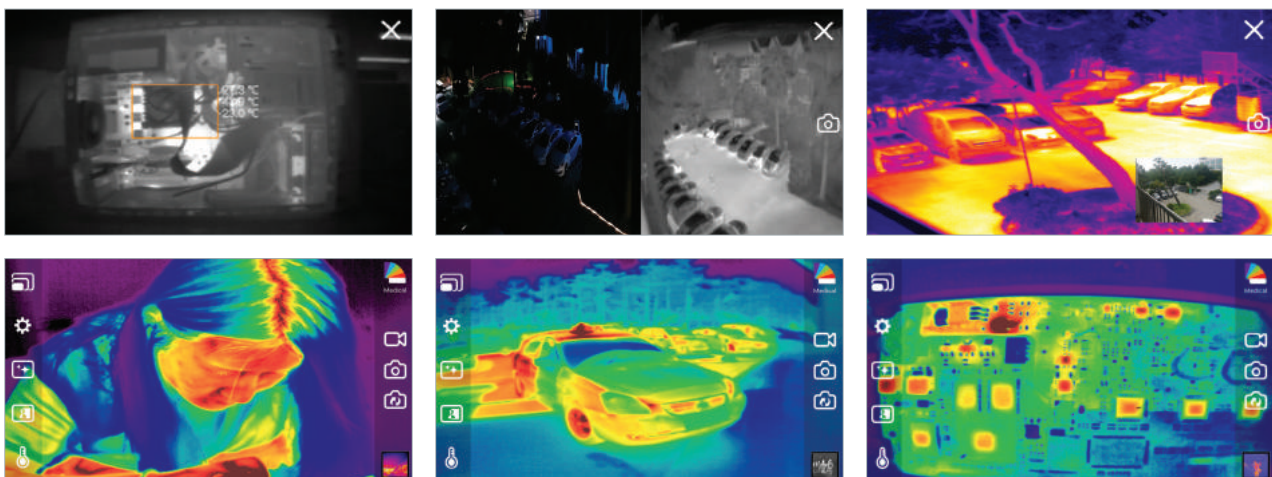
## THERMAL EXPERT™ for Windows

- Realtime Analysis Tool
- Check the temperature anywhere in picture using mark of Dot, Line, Square
- Alarm with sound by user's setting temperature degree
- Save and Load infrared Image with mark
- Saving the movie with mark is being implemented
- AIE Program (Adaptive Image Enhancement)



Window PC program

## Images from the THERMAL EXPERT™



# SEE THE NEW WORLD THROUGH i3system, Inc.

## Specifications

Array format	384 x 288
Pixel pitch	17 $\mu\text{m}$
Wavelength band	8 ~ 14 $\mu\text{m}$ (Longwave Infrared)
Sensitivity	$\leq 50\text{mK}@F/1, 300\text{K}$
	$\leq 80\text{mK}@F/1.3, 300\text{K}$
Frame rate	< 9Hz
Scene range temperature	-10 $^{\circ}\text{C}$ ~ 150 $^{\circ}\text{C}$ (PLUS: -10 $^{\circ}\text{C}$ ~ 120 $^{\circ}\text{C}$ , PRO: -10 $^{\circ}\text{C}$ ~ 250 $^{\circ}\text{C}$ )
Operating temperature	-10 $^{\circ}\text{C}$ ~ 50 $^{\circ}\text{C}$
Power consumption	$\leq 500\text{mW}$
Weight	< 27g (with lens)
Dimensions (WxHxD)	47 mm x 25 mm x 16 mm (Without Lens)
Interface	Micro USB or USB-C
Platform	Android, Windows
Type of lens	Wide: 6.8 mm f/1.3
	Narrow: 13 mm f/1.0
FOV[ $^{\circ}$ ]	Wide FOV (default): 56.3 $^{\circ}$ (H) x 41.8 $^{\circ}$ (V) - 71.4 $^{\circ}$ (diagonal)
	Narrow FOV (option): 28.7 $^{\circ}$ (H) x 21.7 $^{\circ}$ (V) - 35.3 $^{\circ}$ (diagonal)
Focus range	Wide FOV: 0.2m to infinity
	Narrow FOV: 0.4m to infinity

## TE-Q1 Dimensions



## Range Performance

