

## **ZK-178K** Handheld Infrared Thermal Imager with Visible Light Camera



ZK-178K is an infrared thermal imager with visible light camera which combines surface temperature measurement and real-time thermal image. It also supports real-time image transmission function. Traditional infrared thermometer can only measure temperature and needs to measure each accessory one by one. Compared with traditional infrared thermometer, ZK-178K can measure multiple temperatures of accessories once and potential problems can be clearly displayed on the screen. It also has a wide range of measurement and photography functions to work in a variety of shooting environments. For example, the built-in high brightness lamp allows you to easily find the tested object in dark environment. This product adopts a new generation of sensor module to ensure excellent infrared resolution and multiple color plate mode.

## **Features**

- Real-time image transmission
- Visible Light Camera
- UFPA Sensor
- High/Low Temperature Measurement
- High Image Visibility
- Adjustable Emissivity
- Storage Card
- Temperature Range
- Thermal Resolution
- High Temperature Alarm
- Type-C USB Port for Charging and Data Transmission
- Flashlight
- PC Software for Image Analysis

## Optional





## **Specifications**

Sensor	Uncooled Focal Plane
Temperature Range	30°C ~ 45°C
Resolution	0.1°C
Accuracy	±0.5°C (@ 25°C ambient temperature)
Optimal Measuring Distance	1m
Temperature Measurement Response Time	≤500ms (95% of reading)
Thermal Resolution	19200 (160 × 120)
Pixel Dimensions	12µm
Palettes	Iron red, rainbow, glowing white, glowing black, glowing red, lava, high-contrast rainbow
Bandwidth of Infrared Spectroscopy	8~14µm
Field of View (FOV)	$56^{\circ}(H) \times 42^{\circ}(V)$
Instantaneous Field of View (IFOV)	бmrad
Thermal Imaging Sensitivity	<50mk
Frame Rate	<9Hz
Temperature Display	Center temperature measurement and high temperature tracking (default)
Image Format	BMP
Image Modes	Thermal camera, visible camera, image blending
Temperature Measuring Point	Besides central point, 3 temperature measuring points can be added
Visual Camera	$\checkmark$
Resolution of Visible Camera	640 × 480
Display Resolution	320 × 240
Image Blending	0% (total visual camera), 25%, 50%, 75%, 100% (total thermal camera)
PC Analysis Software (PC)	$\checkmark$
Real-time Image Transmission	PC software image projection
Data Communication	Type-C USB
Auto Power Off	Selectable (5min, 10min, 30min), 30min auto power off (default)
Battery Life	≥6 hours
Charging Time	≤5 hours
Charging Voltage/Current	5V/2A
Image Storage	Micro SD card

GENERAL CHARACTERISTICS	
Power	A single Li-ion 3.7V/5000mAh 26650 battery
Display	2.8" TFT LCD
Product Color	Red + Grey
Product Size	236mm x 75.5mm x 86mm
Standard Accessories	Manual, Type-C USB cable, 16GB TF card
Standard Carton Gross Weight	2.2kg