Handheld Thermal Camera

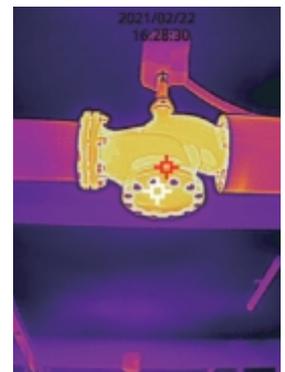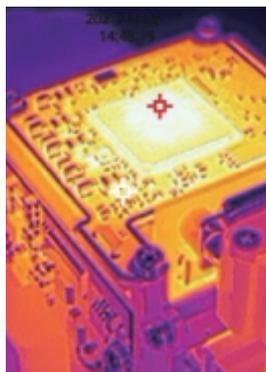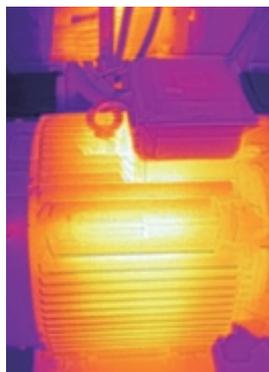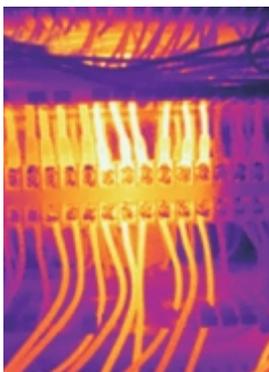CE **-20°C ~ +650°C**

ThermEye 640M Pro

ThermEye 640M Pro Handheld Thermal Camera is high-resolution and manually focused. It is provided with a built-in self-developed 12µm high-performance 640×512 infrared detector and a 5,000,000-pixel visible light camera of 35 mK thermal sensitivity and 30 Hz high frame rate. With its accurate manual focusing function, it can save focusing time and provide accurate data and clear images to meet the requirements of research and analysis work. With its excellent characteristics, ThermEye 640M Pro Handheld Thermal Camera is the right-hand assistant for engineers in scientific research, professional equipment, and building inspection.

Features

- Real 320,000 real-time infrared temperature measurement points + 5,000,000-pixel visible light resolution.
- High resolution, high frame rate, high accuracy, wide range, all in ThermEye 640M Pro.
- USB plug and analyze, support full-frame real-time transmission and analysis of temperature information.
- Three-point temperature display, custom point/line/area temperature measurement.
- Complete analysis data on PC, easy to operate the APP.
- Built-in 5 image modes+10 color palettes.
- Support full-frame high/low temperature alarm and timed photographing.
- Solid and durable, IP54 + 2m-drop protection.

Applications

- Power maintenance
- Equipment maintenance
- Circuit design
- Vehicle maintenance
- HVAC maintenance

Technical Specifications

Model	ThermEye 640M Pro
Detector Type	Uncooled Micro bolometer
Resolution	640x512
Spectral Band	7.5 ~ 14 µm
Pixel Pitch	12 µm
NETD	<35mK
IFOV	1.31mrad
Frame Rate	30Hz
Focal Length	9.1　　　mm
FOV	24°x18°
Focusing Mode	Manual focus
Measurement Range	-20°C ~ 150°C ~ 100°C ~ 650°C
Measurement Accuracy	±2% or ±2°C
The Min. measurable temperture difference	0.1°C
Measurement mode	Center spot/hot and cold spot tracking and temperature display
Custom temperature measurement tools	Movable spot/line/area temperature measurement, up to 10 spots, 10 areas, 10 lines. Temperature trend can be viewed via temperature measurement line.
Temperature measurement unit	Celsius, Fahrenheit, Kelvin
Emissivity settings	0.01-1.00, step length 0.01
Ambient temperature settings	-10~50°C, step length 1°C
Distance settings	1-20m, step length 1m
Digital zoom	1×, 2×, 4×, 8×
Image mode	Thermal, dual-spectrum fusion, visible light, PIP
Color palettes	10 kinds
Temperature alarm	Support
Alarm type	Image alarm
Temperature Scale	Auto/Manual
Isotherm	Support custom color palettes setting within a certain temperature range
Temperature video recording	Yes, support frame rate setting between 0.05s and 100s
Smart patrol	Yes, support custom general mode
Laser Pointer	Yes
Digital camera	5MP
Image/Video Storage	JPG images with temperature data in thermal and visible light modes; H.264 Video without temperature data and IRV video with temperature data
Voice annotation	Yes
Language	English, Polish, Russian, Korean, Hungarian, Brazilian Portuguese, German, French, Spanish, Italian, Turkish, Traditional Chinese
Screen	3.5-inch touch screen (480 x 640)
Image naming	Auto/manual input, QR code scanning
Memory card	Standard 32GB MicroSD card
Battery type	Rechargeable and detachable Lithium battery
Power interface	USB Type-C
Data Communication Interfaces	USB, WiFi
Charging time	about 3h
Battery operating time	about 3h
Impact and Vibration	Impact 25g (IEC 60068-2-27); vibration 2.5g (IEC60068-2-6)
Power Management Interfaces	Auto shutdown: 5 minutes, 10 minutes, 20 minutes, off)
Analysis software	PC (Infrared analysis software) or mobile (IOS/Android APP)
Tripod mounting interface	1/4"-20-UNC
Operating temperature range	-10~+50°C
Storage temperature range	-20~+60°C
RH	10% ~ 95%,no condensation
Drop	2m
Encapsulation	IP54(IEC 60529)
Shock &Vibration	Shock 25g(IEC 60068-2-27); Vibration 2.5g(IEC60068-2-6)
Camera Dimension(L x W x H)	258.4 × 105.1 ×102.3mm
Weight	about 683.5g
Standard accessories	5V 3A power adapter(with various plugs to fit global regions), USB cable, SD card, battery×2, QSG, battery charger, calibration certificate, packaging list,hard transport case

Specification are subject to change