RT400/630 Series
Expert Thermal Camera

Equipped with a new-generation detector with a resolution of 480×360/640×512 and a NETD as low as 35mK, the new RT400/630 series can capture more subtle hotspots, and display sharper and cleaner thermal images. The device has rich and powerful features such as Android OS, trend analysis, area measurement. It is a new strong tool for expert-level full-scene analysis.

Product Highlights

Clear Thermal Images, Precise Temperature Measurement

- Equipped with a 12μm uncooled infrared detector, with a resolution of 640×512/480×360, supporting super resolution.
- NETD as low as 35mK, and measurement accuracy of ±2℃ or ±2% of reading (whichever is greater).

Various Lenses and Fast Focusing

- Standard 25° lens, with optional wide-angle, long-focus, ultra-long-focus, and macro lenses, flexible for diverse scenarios.

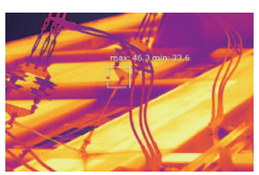
Functional Upgrade to Improve Efficiency

- Android operating system, more convenient to operate.
- Support intelligent image stabilization, making temperature measurement images more stable.
- Support laser rangefinding and area measurement.

Intelligent Analysis, Efficient Temperature Measurement

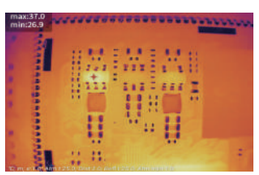
- Support up to 20 points/lines/areas to analyze more temperature details in the screen.
- Support customized isotherms to highlight temperature segments or areas that need more attention.
- Support intelligent routine inspection, enabling import and editing of general task packages, etc.

Applications

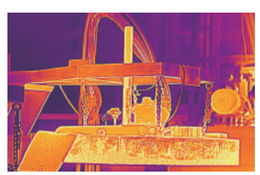


Electric Routine Inspection

Chemical Operation and Maintenance



Electronic and Electrical R&D



High Temperature Material Monitoring

Specifications	RT400	RT630
Thermal Imaging		
Detector Type	12μm uncooled infrared detector	
Infrared Resolution	480×360	640×512
Super Resolution	960×720	1280×1024
Spectral Band	7.5-14μm	
Thermal Sensitivity (NETD)	＜35mK (25℃,F1.0)	
Frame Rate	25Hz	
Focal Length	Standard lens: 17.7mm; super telephoto lens: 60.9mm; telephoto lens: 31.5mm; wide-angle lens: 9.5mm; macro lens (0.2×): 13mm; super macro lens (0.4×): 14.8mm.	
FOV	Standard lens: 25°×20°; super telephoto lens: 7°×5.6°; telephoto lens: 14°×11.2°; wide-angle lens: 45°×36°.	
Spatial Resolution (IFOV)	Standard lens: 0.92mrad; super telephoto lens: 0.27mrad; telephoto lens: 0.52mrad; wide-angle lens: 1.71mrad; Macro lens: One pixel corresponds to 60μm; super macro lens: One pixel corresponds to 30μm.	Standard lens: 0.68mrad; super telephoto lens: 0.2mrad; telephoto lens: 0.38mrad; wide-angle lens: 1.26mrad; Macro lens: One pixel corresponds to 60μm; super macro lens: One pixel corresponds to 30μm.
Focus Mode	Manual focus, one-button center focus, automatic center focus, single-touch automatic focus, laser-assisted focus, electric micro focus	
Minimum Imaging Distance	Standard lens: 0.4m; super telephoto lens: 4m; telephoto lens: 3m; wide-angle lens: 0.2m; macro lens: 39mm; super macro lens: 19mm	
Measurement Range	-20℃~+150℃, 100℃~650℃; optional: 400℃~1500℃	
Measurement Accuracy	±2℃ or ±2% of readings, whichever is greater.	
Image Display		
Display	5-inch OLED touch screen, resolution 1280×720	
Visible Light Camera	13 megapixels	
Digital Zoom	1× ~ 10×	
Palettes	19 options	
Image Mode	Infrared, visible light, PIP, dual-spectrum fusion	
Temperature Width Stretch	Support	
Measurement and Analysis		
Analysis Functions on the Device	Support up to 15 movable points, lines, frames, circles and polygons,and up to 5 preset modes	Support up to 20 movable points, lines, frames, circles and polygons,and up to 5 preset modes
Laser Rangefinding	Support	
Area Measurement	Support	
Hygrothermograph	Support	
Positioning	Support	
Temperature Difference Analysis	Support	
Trend Analysis	Supports temperature trend recording and analysis.	
Image Freezing	Support	
Analysis Report	PDF format. Support editing and template importing on the PC client.	
Supporting Software	PC (Infrared Analysis Software) & Mobile Device (iOS/Android APP)	
Image Storage		
Storage Medium	Standard 64GB Micro SD, Support SD, SDHC, SDXC,up to 2TB	
Text Notes	Support	
Voice Notes	Support	
Video Functions		
Radiate Infrared Video Recording	Support compressed full radiation video recording (.irv), up to 25Hz video recording.	
Non-radiate Infrared or Visible Light Video Recording	Standard MP4 video recording	
Radiate Infrared Video Stream Transmission	Analysis at about 25Hz on PC	
Non-radiate Infrared Video Stream Transmission	RTSP H.264	
Video Resolution	1920x1080	
System Functions		
Intelligent Image Stabilization	Support	
Intelligent Panoramic Stitching	Support panoramic stitching on the PC client, and one-click synthesis.	
Intelligent Routine Inspection	Supported. General task package import and editing, standard and automatic naming of images	
Routine Inspection Record Self-inspection	Support	
Dual-Spectrum Video Recording	Simultaneous infrared video and visible light video recording, in MP7 format	
Communication Protocol	Wi-Fi, Bluetooth, USB,DP, Type-C to HDMI	
Voice Control	Voice assistant, quick command recognition	
Flashlight	Support	
Others		
Microphone/Speaker	Support	
Battery	10,000mAh lithium-ion battery, field-replaceable, support fast charging	
Charging Mode	USB Type-C or desktop charger	
Battery Life	Continuous operating time ⩾ 6 hours (depending on the actual environment and service conditions)	
External Interface	USB3.0 Type-C, SD card, SIM card, Mini HDMI	
Tripod Socket	UNC 1/4-20 interface for tripod	
Operating Temperature	-20℃~+55℃	
Operating Humidity	10%~95% (non-condensing)	
Storage Temperature	-40℃~+70℃	
IP Grade	IP54	
Shock and Vibration	Shock: 25g (IEC 60068-2-27); vibration: 2.5g (IEC60068-2-6)	
Weight and Dimensions	About 1.3kg (with battery), 144×129×307mm (subject to actual situations)	
Authentication	CE/RoHS/CMA, etc.	
Packing List	Thermal camera×1, standard lens, lithium-ion battery×2, charging stand, charger (with plug for use in multiple countries), charging cable, Bluetooth headset, SD card 64G, Type-C cable, lens hood, mold drawing, data download card, calibration certificate, certificate of qualification, hand strap (with buckle), safety box, lens cap (with screws).	