RM320
Handheld Thermal Camera

RM320 is equipped with a 12μm infrared detector, which brings 384×288 high-resolution infrared thermal images and a high sensitivity of 35mK to easily capture small hot spots.
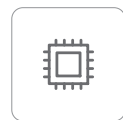
With a temperature measurement range extendable to 650°C, the device is suitable for electric routine inspection, electronic circuit design, HVAC, industrial manufacturing, petrochemical industry, photovoltaic testing, and many other fields.

Product Highlights

High-definition Thermal Images, Capturing Subtle Hot Spots

- Equipped with a self-developed 384×288 high-pixel 12μm advanced-technology detector.
- Capable of distinguishing 0.035°C temperature differences, easily capturing subtle hot spots.

Smart Upgrade for You to Handle Complexity with Simplicity

- Support intelligent shooting, user customization, import and distribution of inspection task packages, simplifying the task process and improving routine inspection efficiency.
- Support temperature trend analysis, helping users observe temperature distribution and changes in real time.
- Support isotherm function to highlight the temperature segments or areas that need attention.
- Support analysis software on the PC client and secondary analysis of video files.

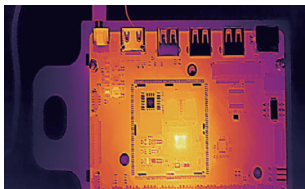### Upgraded Performance for More Application Scenarios

- -20°C~+650°C wider temperature range, suitable for more industrial temperature measurement scenarios.
- IP54 and 2m drop protection, solid and durable.
- Standard 32GB MicroSD card, expandable to 512GB, supporting temperature video recording.

Specifications

Thermal Imaging

Detector Type	12μm uncooled infrared detector
Infrared Resolution	384×288
Spectral Band	7.5-14μm
Thermal Sensitivity (NETD)	<35mK (25°C,F1.0)
Frame Rate	30Hz
Lens Focal Length	9.1mm
FOV	27°×20°
Spatial Resolution (IFOV)	1.31mrad
Focus Mode	Manual focus
Measurement Range	-20°C~+150°C; 100°C~650°C
Measurement Accuracy	±2°C or ±2% of readings, whichever is greater.

Image Display

Display	3.5-inch touch screen, 640×480 resolution
Visible Light Camera	5 megapixels
Digital Zoom	1×, 2×, 4×, 8×
Palettes	10
Image Mode	Infrared, visible light, PIP, dual-spectrum fusion
Temperature Width Stretch	Automatic/Manual

Measurement and Analysis

Analysis Functions on the Device	Custom points/lines/areas; up to 10 points, 10 areas, and 10 lines;Center point/Hot and cold spot tracking and temperature display
Supporting Software	PC (Infrared Analysis Software) & Mobile Device (iOS/Android APP)

Image Storage

Storage Medium	Standard 32GB MicroSD, up to 512G
Text Notes	Support
Voice Notes	Support

Video Recording

Radiation Infrared Video Recording	Support
Non-radiation Infrared or Visible Light Video Recording	Support

System Functions

Intelligent Routine Inspection	Support
Laser Pointer	Support
Video Transmission	Support UVC video transmission
Communication Protocol	Wi-Fi, USB

Others

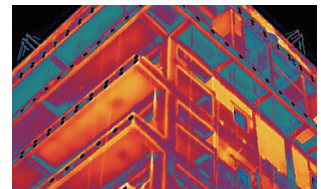|	
Battery	Rechargeable and detachable lithium-ion battery
Charging Mode	USB Type-C or desktop charger
Battery Life	About 6h (about 3h for a single battery)
External Interface	USB Type-C, SD card
Tripod Socket	UNC 1/4-20 interface for tripod
Operating Temperature	-10°C~+50°C
Operating Humidity	10%~95% (non-condensing)
Storage Temperature	-20°C~+60°C
IP Grade	IP54
Shock and Vibration	Shock: 25g (IEC 60068-2-27); vibration: 2.5g (IEC60068-2-6)
Weight and Dimensions	About 683.5g, 258.4×105.1×102.3mm
Authentication	CE/RoHS/CMA, etc.
Packing List	Thermal camera ×1, 5V 3A power adaptor, USB cable, SD card, battery ×2, Quick Start Guide, battery charger, calibration certificate, package list, safety box

Applications

Circuit Design   Electric Routine Inspection   Industrial Manufacturing   Construction Inspection

RayThink Technology Co., Ltd.

Company Address: No.5 Wanshoushan Road, Fulaishan Street, Yantai Area of China (Shandong) Pilot Free Trade Zone
Postal Code: 264000   Official Website: http://www.raythink-tech.com   Service Email: sales@raythink-tech.com

*The information is for illustrative purposes only. The pictures and technical specifications are subject to change without prior notice. Sample No.: G2024-RM320-2P001