



RM320

Handheld Thermal Camera

RM320 is equipped with a 12 μ m infrared detector, which brings 384 \times 288 high-resolution infrared thermal images and a high sensitivity of 35mK to easily capture small hot spots.

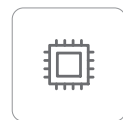
With a temperature measurement range extendable to 650 $^{\circ}$ C, the device is suitable for electric routine inspection, electronic circuit design, HVAC, industrial manufacturing, petrochemical industry, photovoltaic testing, and many other fields.



Product Highlights

High-definition Thermal Images, Capturing Subtle Hot Spots

- Equipped with a self-developed 384 \times 288 high-pixel 12 μ m advanced-technology detector.
- Capable of distinguishing 0.035 $^{\circ}$ 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

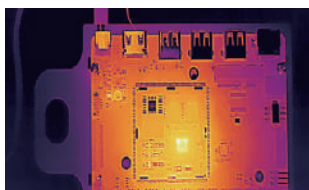
- -20 $^{\circ}$ C~+650 $^{\circ}$ C wider temperature range, suitable for more industrial temperature measurement scenarios.
- IP54 and 2m drop protection, solid and durable.
- Standard 32GB MicroSD card, expandable to 512GB, supporting temperature video recording.



Specifications

| Thermal Imaging | |
|---|---|
| Detector Type | 12μm uncooled infrared detector |
| Infrared Resolution | 384×288 |
| Spectral Band | 7.5-14μm |
| NETD | <35mK (25°C,F1.0) |
| Frame Rate | 30Hz |
| Lens Focal Length | 9.1mm |
| FOV | 27°×20° |
| 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



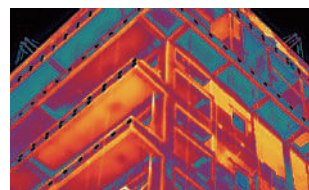
Circuit Design



Electric Routine Inspection



Industrial Manufacturing



Construction Inspection

Raythink Technology Co., Ltd.

✉ sales@raythink-tech.com

☎ +86-19806191838

🌐 www.raythink-tech.com

📍 Room 3002, Building 2, No.5 Wanshoushan Road, Fulaishan Street, Yantai Area of China (Shandong) Pilot Free Trade Zone

■ This manual is illustrative only. Technical specifications are subject to change without prior notice.