

# RM620 Handheld Thermal Camera

RM620 is equipped with a  $12\mu$ m infrared detector, which brings  $640 \times 512$  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 640×512 high-pixel 12µm advanced-technology detector.
- Capable of distinguishing 0.035°C temperature difference, IFOV as low as 0.63mrad, 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  | 640x512   |
| Spectral Band  | 7.5-14µm  |
| Thermal Sensitivity (NETD)                                 | <35mK (25°C,F1.0)   |
| Frame Rate   | 30Hz  |
| Focal Length   | 19mm  |
| FOV  | 23°× 18°  |
| Spatial Resolution (IFOV)                                  | 0.63mrad  |
| Focus Mode   | Manual focus  |
| Measurement Range  | -20°C~+150°C; 100°C~650°C   |
| Measurement Accuracy                                       | $\pm 2^{\circ}$ C or $\pm 2\%$ 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 Analy                                      | vsis  |
| 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<br>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 680g, 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** 

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