# **Compact Thermal Camera P200**

InfiRay P200 Compact Thermal Camera is an ultra-modern thermography tool featuring rotatory lens to provide accurate and intelligent temperature measurement. It is named after the star in the northern circumpolar constellation of Ursa Major - "Megrez".

The unique gravity-sensing UI, rotating menu, and 56° large FOV can satisfy the requirements in special spaces. The 256×192 resolution, 3.5-inch touch screen, and 16G internal memory produce smooth intelligent experiences. Benefiting from the self-developed user-friendly InfiRay temperature measurement analysis software, P200 makes infrared data analysis easy and efficient. It can be connected to the cloud through Wi-Fi to achieve real-time data sharing among multiple devices. It also supports real-time image analysis through USB and settable alarm threshold and multi-area flexible alarm on one screen. P200 has become the right-hand assistant for operation and maintenance engineers, HVAC engineers, and equipment inspectors.

Rotate to Unlock Your Thermal Potential



## **Rotate: The Vision is Up to You** Free rotating of 90°, for more possibilities

There is no need for user to adapt to the position and angle of the target. With P200 0-90° rotary lens, temperature measurement and inspection have never been so easy and convenient. The gravity-sensing UI can be switched between horizontal and vertical measurement at will. The rotating menu and 56° large FOV are also optimized for wider and taller targets.

No Fear of Tall Targets



No Difficulty in Narrow Spaces







# Accurate Enough: More Precise and Powerful

One Step Faster to Become the Leader

P200 is embedded with InfiRay self-developed high-sensitivity VOx infrared detector with 256×192 resolution and ≤ 0.04°C. It can provide extraordinary high-definition thermal images with amazing details, higher temperature accuracy, and better troubleshooting. The frame rate of 25Hz makes imaging more smooth. Everything seems more real.

efficiency.

#### 256×192 Resolution, Clear and Accurate

The resolution of 256×192 reveals more temperature details. The temperature resolution of 0.04°C brings high definition. The measurement range up to 550°C satisfies the requirements of high-temperature targets.



#### One-Hand Operation

Put the overall situation in your hand. P200 is portable, pick-and-play, and reliable, to improve efficiency continuously.



2,000,000-pixle Visible Light at the Same Time

Infrared module for temperature measurement and daylight module for positioning, with fusion and PIP mode to help fast defect locating and improve inspection efficiency.



56° Wide FOV, Efficiently Measurement

Cover ultra-wide area in a glance, providing multiplied inspection

### Smart enough: Built-in InfiRay Cloud Ecosystem Benefit Beyond the Screen

Accessing InfiRay Cloud Services through Wi-Fi, Multiple Devices Sharing Data

Collect data here and analyze on the cloud, "once and for all"



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Portable or Fixed? Meet more monitoring and analysis requirement

Support USB plug-and-play analysis, flexible alarm threshold setting, and multi-area real-time alarm on one screen



Professional Software and **Temperature Analysis** 

InfiRay self-developed user-friendly temperature measurement analysis software displays the





## **Application Fields**



### Main Specifications

|                     | Model                                 | P200   |
|---------------------|---------------------------------------|--|
| Dete                | Focal plane array/Spectral range      | Uncooled FPA microbolometer (VOx)/8-14µm   |
| ector Imagin        | Pixel pitch                           | 12 μm  |
|                     | Infrared resolution                   | 256x192 pixels   |
|                     | NETD                                  | ≤0.04°C@30°C (≤40mk)   |
|                     | FOV                                   | 56°×42°  |
| ра<br>2             | Focal length                          | 3.2mm  |
| nd optical data     | Spatial resolution/IFOV               | 3.75mrad   |
|                     | Focus                                 | Focus-free   |
|                     | fnumber                               | 1.1  |
|                     | Image frequency                       | 25Hz   |
|                     | Digital zoom                          | 2x, 4x   |
| Image presentation  | Resolution                            | 1920x1080 pixels. CMOS   |
|                     | Visual camera                         | 2 Megapixels   |
|                     | Screen                                | 3.5 inch touch screen, 960x640   |
|                     | Color palette                         | 7 color palettes (white hot black hot iron lava rainbow rainbowHC RdGv)  |
|                     | Image mode                            | IR/Visual/PIP/Fusion   |
|                     | Fill-in LED                           | available  |
| _                   | Temperature Range                     | -20°C-+550°C   |
|                     | Accuracy                              | $+2^{\circ}$ C or $+2^{\circ}$ (of reading whichever is greater)   |
| ŀ                   | Measurement mode                      | Central spot (for full frame) hot spot cold spot   |
| <                   | Spotmeter                             | 10 in live mode  |
|                     | Line                                  | 10 in live mode  |
| lea                 | Area                                  | 10 in live mode  |
| surement analysis   | Automatic hot/cold detection          | Automatic maximum/minimum markers within area  |
|                     | Temperature alarm                     | Full frame high/low temperature alarm  |
|                     | Alarm mode                            | Image alarm  |
|                     | Auto/timed photograph                 | Support auto photograph when trigger alarm and timed photograph, photo numbers and time interval can be set    |
|                     | Video streaming                       | Real-time radiometric infrared-video streaming over UVC  |
|                     |                                       | Data/time, °C/°F/K, language (12, English/Russian/   |
|                     | Settings                              | Polish/German/French/Korean/Portuguese/Spanish/Hungarian/Italian/Turkish/Traditional Chinese)                  |
|                     | Emissivity correction                 | Variable from 0.01 to 1.0 (increment: 0.01)  |
|                     | Atmospheric transmissivity adjustment | Object distance setting (0.5-4m, step size 0.25m); Ambient temperature(adjustable, -10°C~+50°C, step size 1°C) |
|                     | Memory card                           | 16G Micro SD card  |
| Storage Powersupply | File format - thermal                 | IPG, with original temperature data  |
|                     | File format - visual                  | IPG without temperature data   |
|                     | Image naming                          | Support automatic naming/text input/naming through OR code scanning  |
|                     | Voice annotation                      | voice recording (unlimited time), stored with images (microphone built-in)                                     |
|                     | Text annotation                       | available  |
|                     | Interface                             | LISB Type C direct-charging  |
|                     | Battery Operation time                | About 6 hours continuous operation   |
|                     | Charging time                         | About 3 hours  |
|                     | Power management                      | Auto shut-down (5 min 10 min 20 min)   |
| Environmer          | Working temp.                         | -10°C-+50°C  |
|                     | Storage temp.                         | -20°C~+70°C  |
|                     | Humidity                              | ≤95% (Non-condensing)  |
|                     | Encapsulation                         | IP54(IEC 60529)  |
|                     | Drop resistance                       | 2m   |
| 井                   | Wifi                                  | available  |
| Dimension & weigh   | Weight                                | 210g   |
|                     | Dimension                             | 142mm×19mm   |
|                     | Tripod                                | 1/4"-20-LINC   |
| ≓<br>terface        | Power input                           | DC 5V  |
|                     | Accessories                           | Strap portable hag LISP cable user manual  |
|                     | ACCESSUITES                           | Strap, portable bag, OSD Cable, user manual  |

Vehicle Maintenance