

# ALL-IN-ONE THERMAL DEVICE

## HIGH PERFORMANCE DEVICE

The I-Cam 380 P-Series is a 384 x 288 resolution imager that allows thermographers to pinpoint overheating components and take accurate temperature measurements. Perform thermal analysis and build panoramic mosaics. Features audio and visual alarms as well as interval photography to capture images automatically. Create report documents and print over Wi-Fi connection. An optional high temperature filter is available to extend measurements up to 2000°C (3632°F) targeting critical infrastructure and giving users dependable performance in extreme conditions.



I-Cam 380 P-Series



## BETTER VIEWING EXPERIENCE

The ergonomic rotating lens and 5" (1280x720) LCD touchscreen is designed to help thermographers image quickly and comfortably at any angle, including overhead or between narrow gaps. Prevents fatigue and is best for diagnosing temperature sensitive components in hard-to-reach areas.



## DETAILED THERMAL ANALYSIS

Perform analysis with 5 temperature spots, 5 lines, and 5 areas boxes of measurement. Data is saved with the images and can be exported on the SD card. Create 60 seconds of voice annotation per image and text annotation to assist in creating report documents. Create isotherms and sketch on images to differentiate areas of concern.



## DOCUMENT CREATION & WI-FI PRINTING

Create PDF documents using the on-board analysis and reporting capabilities. Analysis reports can also be printed instantly via a Wi-Fi printer. Bluetooth optional.



The I-Cam 380 P-Series thermographic camera is a 384 x 288 resolution imager with a temperature calibration of -20 °C to 150 °C (-4 °F to 302 °F); an optional high temperature range up to 2000 °C (1472 °F to 3632 °F) is available. The device has an accuracy of  $\pm 2^{\circ}\text{C}$  ( $\pm 3.6^{\circ}\text{F}$ ) or  $\pm 2\%$ . It is capable of quantitative thermal analysis and features alarming functions as well as document creation and Wi-Fi printing. Software included.

## Features

- Interval photography
- Build panoramic mosaics
- Automatic alarming
- Voice and text annotation
- Sketch on image
- 5 spots, 5 areas, and 5 lines of measurement
- Print report documents via Wi-Fi
- Optional high temperature calibration
- 5 MP visual camera
- 270° rotating LCD touchscreen, 70° lens angle
- Power management

## Applications

- Insulation inspections
- Air leakage/energy saving
- Home contractor inspections
- Roof inspections
- HVAC/cold storage
- Electrical/general maintenance
- Predictive maintenance
- Building inspections
- Scientific research
- Critical infrastructure

## Specifications

- **Pixel Resolution:** 384 x 288
- **Accuracy:**  $\pm 2^{\circ}\text{C}$  ( $\pm 3.6^{\circ}\text{F}$ ) or  $\pm 2\%$
- **Temperature Range:**
  - Standard: -20 °C to 150 °C (-4 °F to 302 °F), 150 °C to 800 °C (302 °F to 1472 °F)
  - Hi-Temp: 800 °C to 2000 °C (1472 °F to 3632 °F)
- **Operation Range:** -15 °C to 50 °C (5 °F to 122 °F)
- **Storage Range:** -40 °C to 70 °C (-40 °F to 158 °F)
- **Detector Array:** VOx
- **Pixel Pitch:** 25  $\mu\text{m}$
- **Focal Length:** 25 mm
- **FOV:** 21.7° x 16.4°
- **IFOV:** 0.99 mrad
- **Focus:** motor-drive/automatic
- **Measurement Distance:** minimum 0.4 m
- **Spectral Band:** 7.5  $\mu\text{m}$  to 14  $\mu\text{m}$
- **Thermal Sensitivity (NETD):**
  - < (45 mK) 0.045 °C at 30 °C (86 °F)
- **Frame Rate:**
  - Standard: 25 Hz P-Series
  - Optional: 9 Hz S-Series
- **Humidity:** 95% non-condensing
- **Pixel Operability:** > 99 %
- **Shock/Vibration:** 25 G/2 G
- **Dimensions (without lens):**
  - 135 mm x 145 mm x 206 mm (L x W x D  $\pm 0.5$  mm)
  - (5.31" x 5.71" x 8.11" (L x W x H  $\pm 0.02$ "))
- **Power:** DC 12V
- **Battery:** Li-ion, rechargeable
- **Operation Time:**  $\geq 4$  hours
- **Charging Time:** 3 hours
- **Power Management:** sleep mode
- **Weight (with battery):** 1.35 kg (2.98 lbs)
- **Interface:** USB 2.0, Mini HDMI
- **Document Format:** PDF
- **Printing:** available over Wi-Fi
- **Video Storage:** manual
- **Video Format:** H.264 (with data)
- **Video Out:** Micro HDMI
- **Image Modes:** IR image, visible image, picture-in-picture, enhanced (MIF)
- **Image Format:** IR JPG (with data) + visible JPG
- **Image Polarity:** 8 options
- **Brightness:** adjustable
- **Digital Camera:** 5 MP
- **Zoom:** 1.1 ~ 10X continuous
- **Memory:** SD card (up to 32 G)
- **Screen:** 5" color LCD rotating touchscreen, 1280 x 720
- **Viewfinder:** 1280 x 960 LCOS screen
- **Voice Annotation:** 60 seconds/image
- Speaker & microphone with adjustable volumes
- **IP Rating:** IP54
- **Laser:** Class II 650 nm, < 1 mW
- **Languages:** multinational
- Automatic alarms
- Interval photography (duration and frequency)
- Internal non-uniformity correction (NUC)
- Panorama image mosaic



## Options & Accessories

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- Optional: 800 °C to 2000 °C (high temperature filter)
- Optional: 9 Hz S-Series
- Optional: Bluetooth
- Wide Angle: 13 mm (40.5° x 31.0° FOV)
- Telephoto: 55 mm (10.0° x 7.5° FOV)
- Macro Lens: 67 mm (8° x 6°)
- Ultra Telephoto: 85 mm (6.7° x 5.1° FOV)
- Li-ion battery
- Power supply adapter
- Shoulder strap
- USB cable
- Network cable
- 16 GB MicroSD card
- 1/4"-20 tripod support (built-in)
- Laser (built-in)
- Microphone (built-in)
- Software CD
- Windows 32-bit SDK
- Linux SDK (x86, x64 and ARM)

