



infraredcamerasinc.com  
2105 W. Cardinal Dr.  
Beaumont, Tx. 77705  
1-866-861-0788  
409-861-0788

## Benefits

Affordable  
270 ° articulating 2.8" LCD display  
Fast, easy inspections with movable LCD display, auto hot-spot trackers, & 40 seconds of voice recording  
Temperature measurement.  
Car charger included  
Laser pointer  
60Hz RCA video output  
Stores over 1000 images  
Extended warranty

## Applications

Electrical inspections  
Mechanical surveys  
Building inspections  
Flat roof surveys  
Process equipment monitoring  
Research & development  
Medical Applications

The ToughCam P series portable thermal imager offers **outstanding image quality** and temperature measurement performance in an affordable, rugged and easy to use infrared camera.



# ToughCam *P Series*

# ToughCam P Series



## Performance

|                           |   |
|---------------------------|---|
| Voice Annotation          | 40 seconds per image  |
| Detector                  | Uncooled Microbolometer FPA 160 x 120 pixels                        |
| Accuracy                  | +2°C or +2%   |
| Thermal Sensitivity       | 0.06C @ 30°C  |
| Spectral Range            | 7 -14 $\mu\text{m}$   |
| Field of View             | 21.1 x 15.8   |
| Spatial resolution (IFOV) | 1.9 mrad  |
| Minimum focus distance    | 6" to infinity  |
| Temperature Range         | -20°C to 250°C (-4°F to 482°F) optional temp range to 500°C (932°F) |
| Temperature Units         | C, F or K   |

## Outputs

|                 |  |
|-----------------|--|
| Image Frequency | 60Hz (NTSC) or 50Hz (PAL)                  |
| Image Display   | 2.8" LCD                                   |
| Image Storage   | Stores up to 1000 images in onboard memory |
| Laser Pointer   | Class 2, 1mw / 635nm red                   |
| Interfaces      | USB, Video, External Power                 |

## Power

|         |                                       |
|---------|---------------------------------------|
| Power   | 6-9 VDC; AC/DC power supply provided  |
| Battery | Rechargeable li-ion, 3 hour operation |

## Environmental / Mechanical

|                          |   |
|--------------------------|---|
| Operating Temperature    | -20°C to 50°C (-4°F to 122°F)                 |
| Storage Temperature      | -40°C to 70°C (-40°F to 158°F)                |
| Environmental Protection | IP 54   |
| Shock                    | 30g   |
| Vibration                | 3g  |
| Size                     | 9.5"L x 3"W x 2.5"H                           |
| Weight                   | 19 oz. (including battery and lens)           |
| Palettes                 | 11 palettes including color and blk and white |
| Tripod Mount             | Standard 1/4"-20                              |

## Accuracy

This ergonomically designed infrared camera is based on an uncooled microbolometer core that provides crisp imagery and accurate temperature measurements. Adjustable emissivity input and ambient temperature compensation insures accurate temperature readings.

## Long life battery

A long life rechargeable Lithium-ion battery pack operates the camera up to three hours.

## Large image capacity

Up to 1000 images can be stored to Toughcam's on board memory. A USB interface provides image transfer to your PC for analysis, report generation and printing. It will automatically store images at specially timed intervals down to one second.

## Laser pointer

There is a built in laser pointer that facilitates identification of the equipment under inspection. Programmable trigger activates laser, point temperature, area temperature or save function.

## Temperature measurement

Four moveable spot meters, 2 line profiles and isotherms provide temperature measurement throughout the entire image. There are three area boxes with three hotspot trackers and selectable maximum, minimum or average temperatures. It allows for temperature correction with the input of emissivity, distance and relative humidity.

## Settings

The settings include a standby feature, an auto shut off as well as an auto factory default setting that recovers original factory settings. It also has a visible and audible alarming system and a headphone jack for easy playback in noisy environments.

## Standard Accessories

These include a heavy duty carrying case with shoulder strap, two batteries (standard Li-ion replaceable), battery charger, car charger and a USB and RCA connection cable. The ToughCam also comes standard with an S-Video connection.

## Optional

Optional wide angle and telephoto lenses are available, extending Toughcam's range of applications.



.5x Wide angle lens



3x Telephoto lens