



## PTI-170 Series

Portable Thermal Imaging Camera

*You Asked For It—  
Seeing Is Believing—*

*DELIVERS MORE THAN THE HUMAN EYE CAN DETECT  
WITH 44% HIGHER RESOLUTION THAN ORDINARY CAMERAS*



### Process Sensors Offers Complete Solutions:

- High Performance Cameras
- Buy or Lease Programs
- Thermography Training
- PSC Smart Report, Easy-to-use Software
- IR Inspection Windows
- Interchangeable Lenses
- Comprehensive Accessories

# **A DISTINGUISHED LEADER—PTI-170 SERIES IN A CLASS BY ITSELF, DELIVERING UNPARALLELED PERFORMANCE FOR YOUR THERMOGRAPHY NEEDS.**

Like no other camera in its class, the PTI-170 Series offers vivid image detail with speedy 60Hz refresh rate.

**Is detail your priority?** The PTI-170 Series is equipped with a 384 x 288 pixel UFPA detector, providing an array that is 44% sharper than the arrays of standard portable imaging cameras. Compare the numbers and see that the versatile and fully radiomatic PTI-170 Series produces crisp, detailed images that make creating comprehensive reports a snap.

**Rugged and Durable.** The rugged PTI-170 Series weighs less than a pound and half but brings the heavy-duty performance and advanced features needed by industry professionals on the job. Long lasting, field replaceable/rechargeable batteries save time and keep you operating efficiently.

## **AN INDISPENSABLE INSTRUMENT FOR:**

- MAINTENANCE AND RELIABILITY PROFESSIONALS
- ELECTRICIANS
- AUTOMATION TECHNICIANS
- PROCESS TECHNICIANS
- QUALITY ASSURANCE ENGINEERS
- PLANT AND FACILITIES MANAGERS
- ENERGY CONSERVATION SPECIALISTS
- HVAC TECHNICIANS

The easily accessible menu gives instant access to four hot/cold spots with audible high/low alarms and allows quick retrieval of stored images.

**Built-in illuminator.** It takes the guessing out of poorly lit areas. Dim conditions or evening inspections are no problem for the PTI-170 Series with built-in visible camera.



**The PTI-170 Series is the complete package for your needs.** Standard features include an onboard full color CCD camera, a distance adjustable position laser pointer, 60 fps real-time video output and a large 3.5", high-resolution LCD display. A 2G removable SD card, Li-Ion rechargeable battery, simple-to-use report software, shoulder-strap, video cable and rugged carry case are all you need to hit the ground running. Optional inter-changeable lenses, USB connection with real-time software and Bluetooth™ voice annotation are available.

## **DUAL-VISION**



The Dual-Vision, Picture-in-Picture feature allows blending visible light images with the high-resolution infrared thermal images to quickly reveal hidden problems effectively. Dual-Vision is fully scalable, allowing manipulation of the image to suit your requirements.

## **3.5" LCD COLOR DISPLAY**



High resolution images point the way to potential problems, the need for preventive maintenance action, highlight inefficiency, and zero in on dangerous situations.



Optional tripod adapter



Standard carrying case & accessories



Flip-up color LCD display



Standard and optional accessories



Optional IR Inspection Windows

## ***PTI-170 Series—a valuable tool with unparalleled performance for real problem solving.***

Whether you are inspecting electrical equipment, mechanical, manufacturing processes, roofs, or building envelopes, detecting invisible anomalies before they become catastrophic is essential to safeguarding your investment.

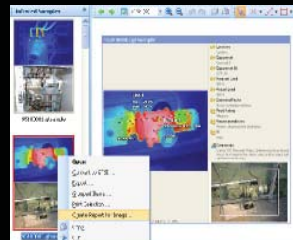
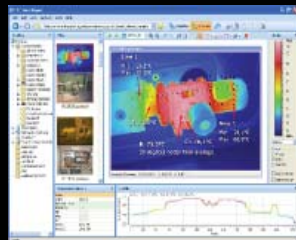
A scheduled predictive maintenance program using a Process Sensors PTI-170 Series camera can prevent costly failures and crippling downtime. With unmatched capabilities, the affordable PTI-170 Series camera stands out from the competition and makes it the right choice for your inspection services.

### **IMAGE TRANSFER/STORAGE**



2GB micro SD card stores over 1000 radiometric images. 60Hz video output.

### **PSC SMART REPORT, EASY-TO-USE SOFTWARE**



Simple and intuitive to use, PSC Smart Report is designed to organize and analyze your images. Featuring Multi-points and Multi-profiles and quick and easy report generation.

# TECHNICAL SPECIFICATIONS FOR PTI-170 Series

THERMAL IMAGING PERFORMANCE	
Field of View	24° x 18°
Minimum focus distance	12"
Focus	Manual
Spatial Resolution (IFOV)	1.3 mrad
Thermal sensitivity (NETD) @ 50/60 Hz	0.08°C at 30°C
Detector type	FPA, uncooled microbolometer
Minimum Span (Auto/Manual)	5°C
Detector Resolution	384x288
Spectral range	8 ~ 14 µm
IMAGE PRESENTATION	
Digital LCD Display	3.5" Color LCD, 640x480
LCD backlit	Automatic
Palettes	Iron, Iron inverted, Rainbow, Feather, Grey & Grey inverted
Image Display	Video Output (Real-time)
Camera operating modes	Dual-Vision, 4 modes, Picture-in-Picture (PiP), full screen IR plus blending.
Visual Light Camera	640x480 pixels, full color
Video output	NTSC and PAL
Illuminator	Yes
Laser Pointer	Adjustable based on measuring distance
IMAGE & DATA STORAGE	
Storage Medium	Removable mini SD card, extendable to 2G ( 3000 IR images)
File formats – Thermal	PSC format, 14 bit measurement data included, software conversion to JPG, BMP, TIF.
Voice annotation	Bluetooth (optional)
PHYSICAL CHARACTERISTICS	
Weight (inc. battery)	≈ 650g (1.433 lbs.)
Size (L*W*H)	10.4" x 4.3" x 6"
Tripod mounting (w/optional Tripod Adaptor)	1/4 - 20

TEMPERATURE MEASUREMENT	
Temperature range	<b>Model PTI-170L:</b> Std. range: -20°C to +250°C, (-4°F to +482°F) Other models: <b>Model PTI-170L-LT:</b> -20°C to + 600°C (-4°F to +1112°F) <b>Model PTI-170L-MT:</b> -20°C to +1000°C (-4°F to +1832°F) <b>Model PTI-170L-HT:</b> -20°C to +1500°C (-4°F to +2732°F)
Accuracy	±2°C or ±2% of reading
Measurement modes	Spot analysis up to 4 spots, auto-tracking max. or min. temperature, isotherm analysis, temperature alarm – (audible)
Correction	Emissivity, ambient temperature, distance, relative humidity
CONTROLS & ADJUSTMENTS	
Set Up Controls	Date/Time, °C/°F, Language
Image Controls	Simple auto/manual scaling, save/ freeze, image retrieval emissivity, alarm, isotherm, spots.
Power save mode	Yes
External power supply	8-12V 3A DC (optional)
ENVIRONMENT SPECIFICATIONS	
Operating temperature range	-15°C to +50°C (-4°F to +122°F)
Storage temperature range	-40°C to +70°C (-40°F to +158°F)
Humidity	Operating and storage 10% to 95%, non-condensing
Encapsulation	IP 54
Shock	Operational: 25G
Vibration	Operational: 2G
INTERFACE	
USB	Thermal video transfers in real time with software (optional)
Bluetooth	Voice recording and playback (optional)

## PROCESS SENSORS CORPORATION

787 Susquehanna Avenue, Franklin Lakes, NJ USA • Tel: 201-485-8773 • Fax: 201-485-8770 • www.ProcessSensorsIR.com • irtemp@processsensors.com  
Corporate Headquarters: 113 Cedar Street, Milford, MA USA • Tel: 508-473-9901 • Fax: 508-473-0715