

# PTI-180

## Powerful Low Cost Portable Thermal Imager

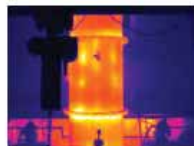
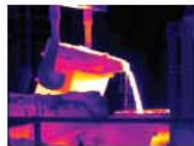
The PTI-180 is a highly precise infrared thermal imager featuring a 160x120 UFPA detector. This very affordable, super-compact unit is lightweight, rugged and easy-to-use. The PTI-180 provides real time imaging at 60 frames per second.

The PTI-180 is equipped with a visual camera that records a visual image of the corresponding thermal image. With the built-in illuminator, the visual camera can shoot even in a dark environment. By using the laser pointer, you can easily associate the object on the thermal image with the physical target.

Powerful analysis tools and report generation software are also provided; and a removable SD card permits up to 2GB of memory storage while Bluetooth technology enables you to record voice wirelessly.

The PTI-180 fits easily into a bag for easy mobility. It comfortably fits into the operator's palm and every button is easily operated with a fingertip.

The PTI-180 is the ideal instrument for predictive maintenance and various other process measurement applications.



- Low Cost and Easy to Use
- 160 x 120 Resolution
- Bluetooth Technology
- Upright Design
- Super Compact with Rugged Ergonomic Construction
- High Resolution Dual Display
- Laser Pointer
- Uncooled Focal Plane Array Technology
- Temperature Tracking
- Powerful Analysis Tools
- Real time imaging at 60 frames per second



## TECHNICAL SPECIFICATIONS FOR PTI-180

DESCRIPTION	CHARACTERISTICS	PERFORMANCE
Detector	Type	Microbolometer UFFA
	Spectral range	8 to 14 $\mu\text{m}$
	Resolution	160 x 120
Imaging Performance	NETD	0.1°C
	Lens/focusing	20° x 15°, manual focusing
	Min focus distance	0.1m
Visual	Built-in digital video	640 x 480 pixels, full color
	Illuminator	To produce clear, high-quality visual images in the dark areas
Image Presentation	Video output	NTSC / PAL
	Image display	Pseudocolor, multi-palettes
Features	Image freeze	Live or freeze
	File function	Removable SD card, up to 2 GB.
Measurement	Temperature range	-20 to 250°C
	Accuracy	$\pm 2^\circ\text{C}$ or $\pm 2\%$
Analysis Functions	Spot	4 Spots: 3 of them can Full-screened moveable
	Temperature tracking	Tracking the highest or lowest temperature spot automatically in the whole image
	Temperature alarm	Preset the alarm temperature value and camera will show alarm when over or below it; Beep when alert.
	Adjustment	Level and span can be adjusted automatically or manually.
	Correction	Emissivity, distance, environmental temperature, relative humidity
Software	Analysis software	Report generation software
Laser Pointer	Type	Type II
	Power consumption	1 mw
	Wavelength	635 nm (red)
System	Settings	Time, date, °C or °F, English
	Dormancy	Automatically
	Power supply	Lithium battery, or 8 to 11V DC supply to charge the battery inside.
	BWT	> 3 hours
Environmental Specification	Operational temperature	-15°C to 50°C
	Storage temperature	-40°C ~ 70°C
	Relative humidity	20 to 90%
Interfaces	Mechanism	With Extended Dock (With Extended interface)
	Electric	USB 2.0, Bluetooth, Video output
Physical Characteristics	Weight	$\approx 500\text{g}$ (including the battery)

### PROCESS SENSORS CORPORATION

787 Susquehanna Avenue, Franklin Lakes, NJ 07417 • Tel: 201-485-8772 • Fax: 201-485-8770 • [www.ProcessSensorsIR.com](http://www.ProcessSensorsIR.com) • [irtemp@processsensors.com](mailto:irtemp@processsensors.com)