

# PTI-280

## Portable Thermal Imager

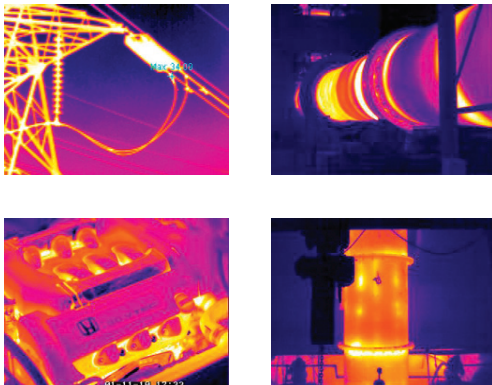
The PTI-280 is a highly precise infrared thermal imager featuring a 320x240 UFPA detector. Built-in various measurement tools allow you to meet multiple needs with features like real-time thermal video transfer. The PTI-280 has 128MB built-in flash memory and Bluetooth technology enables you to record voice wirelessly. The PTI-280 provides real time imaging at 60 frames per second.

The PTI-280 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.

The 270° rotating 3.5" color LCD display and high-resolution viewfinder makes it easy to shoot from difficult positions.

This compact and lightweight IR camera fits easily into a bag for highest mobility. It comfortably fits in the operator's palm and every button is easily operated with a fingertip.

The PTI-280 is the ideal instrument for predictive maintenance and various other process measurement applications.



- Easy to Use
- 320 x 240 Resolution
- Super Compact with Rugged Ergonomic Construction
- 3.5" color LCD display
- Dual Display
- Built-in 128MB flash memory
- Laser Pointer
- Uncooled Focal Plane Array Technology
- Temperature Tracking
- Powerful Analysis Tools
- Upright Design
- Real time imaging at 60 frames per second

# TECHNICAL SPECIFICATIONS FOR PTI-280

DESCRIPTION	CHARACTERISTICS	PERFORMANCE
Image Performance Thermal	Field of view/min. focus distance	24° x 18° / 0.26m
	Spatial resolution (IFOV)	1.3mrad
	Thermal sensitivity	80mK@30°C
	Frame rate	50/60Hz non-interlaced
	Focus	Manual
	Digital Zoom	1x - 8x (0.1 increment)
	Detector type	Focal Plane Array (FPA), uncooled microbolometer 320x240 pixels
	Spectral range	8 to 14 μm
Image Performance Visual	Built-in digital camera	640 x 480 pixels, full color
	PIP	6 modes
Display	Viewfinder	Built-in, 640 x 480 color LCD (TFT)
	LCD display	320 x 240 color LCD (TFT)
	PIP	6 modes
Measurement	Measurement range	-20°C to 500°C (-4°F to 932°F) Up to 1500°C (2732°F) or 2000°C (3632°F), optional
	Accuracy	±2°C, ±2% of reading
Measurement Mode	Spot	(up to 10 movable), manual or automatic placement
	Area	5 movable area, reading of max., min. and average temperature within area
	Isotherm	5 modes
	Line profile	Horizontal or vertical profile
	Emissivity correction	Variable from 0.01 to 1.00 automatic correction based on user input
	Measurement correction	Automatic, based on user input for ambient temperature, distance, relative humidity
Image Storage	Memory	Built-in flash memory, 128MB
Formats	Thermal image	PSC format, 14 bit measurement data included
	Visual image	CCD format
	Voice annotation	Input via headset at least to 40 sec. of digital voice "clip" stored with thermal image
	Text annotation	Predefined by user and stored with image
Laser Pointer	Classification	Class 2, red
Power Source	Battery	Li-on, rechargeable, field replaceable
	Battery operating time	2.5 hours continuous operation
	External power operation	AC adapter
	Charging system	External intelligent charger
	Power saving	Automatic shutdown and sleep mode (user-selectable)
Environmental	Operation temperature range	-15°C to 50°C (5°F to 122°F)
	Storage temperature range	-40°C to 70°C (-40°F to 122°F)
	Humidity	Operating and storage 10% to 95%, non-condensing
	Encapsulation	IP54 IEC 529
	Shock	Operational: 25g IEC 68-2-29
	Vibration	Operational: 2g IEC 68-2-6
Physical Characteristic	Size	90mm x 160mm x 184mm
	Weight	1Kg
	Tripod mounting	1/4" to 20
Interfaces	USB	Image (thermal and visual), measurement data, voice and text which stored in the SD card can be transferred to PC
	Video output	NTSC/PAL/CCIR or RS170 EIA composite video

## PROCESS SENSORS CORPORATION

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