

PTI-160 Series

Easy-to-use — High performance thermal imager



Ideal for:

- *Preventive Maintenance*
- *Utilities*
- *Petrochemical*
- *Building Diagnostics*
- *Industrial Manufacturing Processes*
- *Electronics*
- *Medical/Science Applications*
- *Research & Development*
- *Automotive*
- *Pulp and Paper*
- *Food*



- Fully radiometric thermal imaging camera
- Hi resolution 160 x 120 UFPA
- High spatial resolution of 2.2 mrad
- Automatic temperature tracking (hotspot)
- Large image storage capacity of up to 1,000 radiometric thermal images
- High temperature versions available
- High level of thermal sensitivity
- Very compact and robust (IP54)
- Accurate measurement of temperature within full image
- Flip up color LCD display
- Real time imaging at 50Hz
- Integrated laser pointer
- USB interface
- Lightweight
- Intelligent power management

This is where price and performance meet.

The PTI-160 series are easy-to-use thermographic cameras which offer an optimal price/performance ratio. Equipped with an integrated high-performance UFPA detector, these cameras are quickly ready for use and deliver sharp, accurate thermal images for on-site problem analysis.

PTI-160 cameras are unique measuring instruments and feature automatic hotspot detection, up to 4 moving measurement points, a discernable acoustic alarm signal, an integrated laser pointer and close focusing distance from 0.1m to infinity.

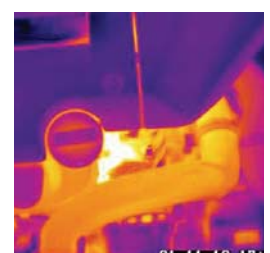
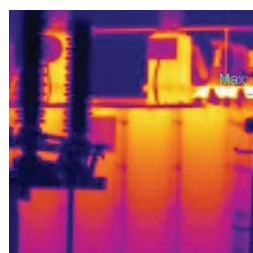
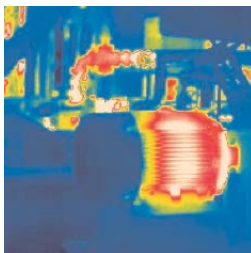
These fully-radiometric camera systems provide precise temperature measurements, optionally up to 1500°C. In addition, the cameras provide a good spatial resolution of 2.2 mrad and a high temperature sensitivity of 0.1°C.

The PTI-160 Series are compact, light weight, and durable. Offering battery operational time of up to 2½ hours and with high capacity image storage of up to 1,000 thermal images, the PTI-160 provides comfortable one-handed operation for fatigueless on-site utilization even over longer periods of time.

All interfaces are situated centrally and well protected in the base of the robust housing in compliance with IP 54 standard.



The thermal imaging cameras in the PTI-160 series are affordable and fully radiometric imaging cameras.

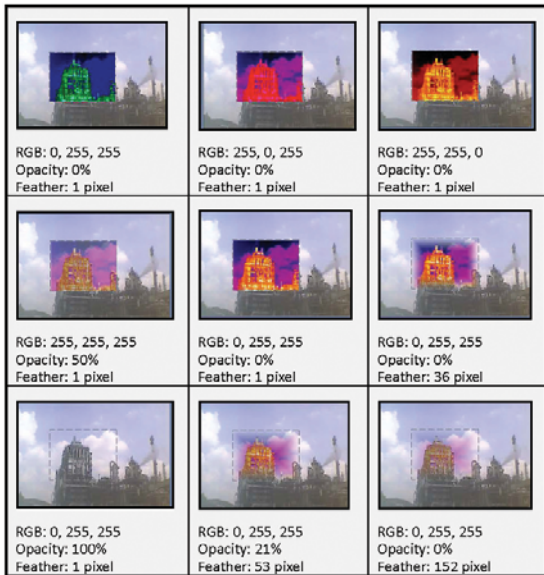


Specifications

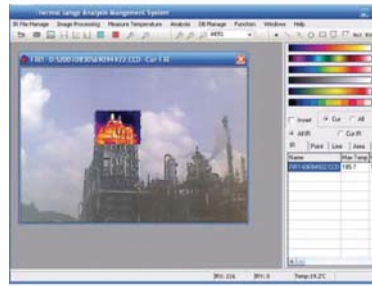
Description		PTI-160	PTI-160 LT	PTI-160 MT	PTI-160 HT
measurement	measurement range	-20°C ~ +250°C	-20°C ~ +600°C	-20°C ~ +1000°C	-20°C ~ +1500°C
	accuracy	±2 °C, ± 2% of reading			
thermal imaging performance	detector type	Focal Plane Array (FPA), uncooled microbolometer 160 x 120 pixels			
	spectral range	8~14 µm			
	FOV	20° x 15°			
	spatial resolution	2.2 mrad			
	thermal sensitivity	0.1 °C at 30 °C			
	frame rate	50/60 Hz			
	focus	manual			
	focus distance	4" (0.10 m) to infinity			
	digital zoom	-			
image presentation	viewfinder	-			
	display	2.5" LCD, pseudo-colors, 6 color palettes			
measurement modes	area	-			
	movable spots	up to 4 moving temperature measurement points (3 manually, 1 automatic)			
	isotherm	yes (between max.- and min.-value)			
	temperature profile	-			
	emissivity correction	user defined 0.01 ~ 1.0			
	measurement correction	automatic, user-defined settings of ambient temperature,distance, rel. Humidity			
image storage	type	internal flash memory up to 1,000 images			
	thermal image	PSC-format, 16 bit measurement data included			
	visual image	-			
	voice annotation	-			
	text annotation	-			
system status indicator	display	-			
laser	type	semiconductor AlGaInP diode Laser, 1 mw / 635 nm red			
	classification	class 2			
battery system	type	Li-on, rechargeable, field replaceable			
	battery operation time	≈ 2.5 hours of continuous operation			
	power supply operation	8-11 V DC			
	power save mode	user defined			
environment specification	operation temperature range	-15 °C ~ +50 °C			
	storage temperature range	-40 °C ~ +70 °C			
	humidity	operating and storage 10% to 95% (not condensing)			
	encapsulation	IP 54 IEC 529			
	shock	25G IEC 68-2-29			
	vibration	2G IEC 68-2-6			
physical characteristics	weight	700 g			
	size	211 x 80 x 195 mm			
	tripod mounting	1/4 " - 20			
interface	PC	USB			
	video output	composite video			
scope of delivery	standard	IR camera with standard 20° optics, LCD display and laser, battery charger 110/230 V, Li-ion battery, video cable, cable USB for image download on PC, manual, carrying case, software, certificate			
	optional	power supply unit (PSU)			

PSC Report 8 Software – Screenshots

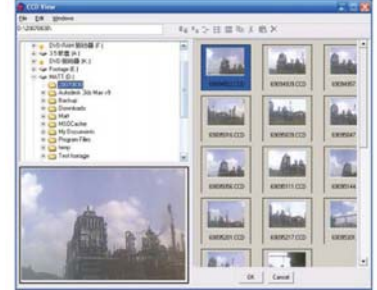
IR Image blending based on different settings



IR blending



CCD images in working area



Auto Hotspot

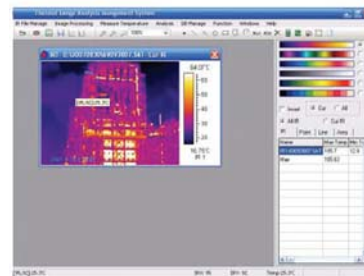
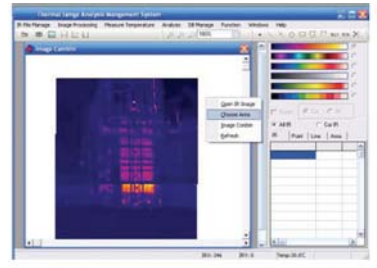


Image blending



Edit Window



IR images in working area

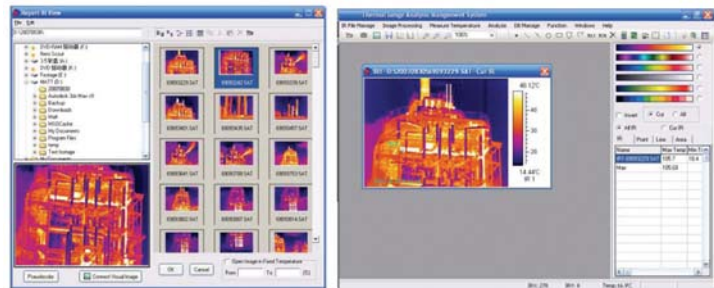
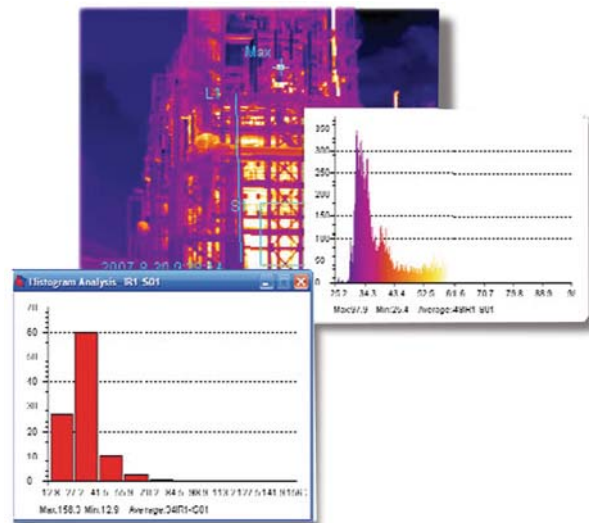


Image – Chart – Histogram



Palettes

