

PhotoTemp[™] MX6 Photographic Infrared Thermometer

Noncontact Temperature Measurement with Digital Photos





Measure



Photograph



Document

Introducing the world's first precision infrared thermometer with integral digital photography. Measure temperature instantly—and simultaneously capture a photo showing the area measured. The PhotoTemp MX6 thermometer records digital photos and incorporates the temperature and date/time of the measurement.



PhotoTemp MX6



very infrared thermometer can measure temperature, but only the PhotoTemp MX6 thermometer measures temperature while simultaneously digitally photographing the measured area and its surroundings.

The proof is in the picture! Temperature measurement locations are instantly captured in a digital photo with a time and date stamp in the image. The photo shows the precision True Dimension[™] laser sighting with a circle of double bright laser dots, pinpointing the exact measurement location, without the need for a view finder.

Make sure the inspection was done properly. Use the DataTemp[®] MX software to upload the temperature measurements and photos to double-check all work.

Ensure consistency by using prior photos as a reference and the True Dimension laser as a guide to guarantee the next measurement is of the same area.

Create customized company reports with PhotoTemp MX6 thermometer data and photos. Automatically download and insert information from PhotoTemp MX6 data files into reports for fast, professional results.





PhotoTemp MX6 Standard Accessories

- Includes: User guide (on CD)
 - DataTemp MX software
 - Thermocouple K probe
- Hardshell carrying case
- USB computer cable

Measurements & Documentation As Simple as 1–2–3



 Log temperature and take photo with PhotoTemp MX6.
 Download data from PhotoTemp MX6 to a computer.
 View, graph and generate reports with DataTemp MX software.

To begin, focus the camera for near or distant photos using the focus ring. With the PhotoTemp MX6 thermometer in "log mode," pull and release the trigger. After taking a successful measurement and a photograph, the PhotoTemp MX6 thermometer prepares to record the temperature and image of the next location. In low light situations, the PhotoTemp MX6 thermometer can automatically illuminate the subject with a built-in flash.

True Dimension™ Laser Sighting

True Dimension is a coaxial three-dot laser sighting system indicating the true diameter of a measurement spot (90% energy). The target is highlighted at all distances with a center measurement dot and two accompanying diameter markers. At the focal point, where the measurement spot size is the smallest, the dots line up vertically, rotating as the unit is moved closer to or further from the target. This advanced

coaxial system uses an extra bright* 635nm laser (tested to the same safety and power standards as less bright laser



bright laser

sights) to clearly highlight the targeted area. * perceived to be twice as bright as lasers with the same power by the human eye.

Advanced Display



Icons for camera active, flash active, and flash charging, and indication of photos remaining

- Confirmation of a successful photo taken
- 30 pre-set common material emissivities
- Adjustable emissivity values (0.01 increments)
- 100 location logging capability
- Customized log location names and alarms

Sub Zero Option

 Measure temperatures from -50°C (-58°F) through 500°C (932°F)

Close Focus Option

 Measure objects as small as 6 mm (.24 in) at 300mm (11.4 in)



DataTemp MX Software

Visualize and systematically maintain and analyze temperature data using Windows compatible Raytek DataTemp MX software. Export data and images in common file formats for easy compatibility with standard programs.









Data Log Tabular View

- See photos next to temperature data
- Create identifiable location names
- Tailor high/low alarms to location
- View minimum, maximum and average temperatures

Graph

- Visually find and review trends
- Quickly compare temperatures of up to 5 locations
- Display infrared temperatures over time
- Store up to 10,000 data points in a file

Real Time Temperature Reporting

- Record photos while in continuous measuring mode
- Set the PhotoTemp MX6 IR thermometer to take photos when high/low alarms exceeded
- Easily view photos through indications on temperature graph
- Simultaneously see temperature trend and photo

Report Creation

- Import and paste temperature data and photographs to quickly create multiple reports
- Add impact to reports with recorded photos

	Temperature Range	-30°C to 900°C (-25°F to 1600°F) (-50°C to 500°C (-58°F to 932°F) with SZ option)
	Accuracy	±0.75% of reading
	(Assumes ambient operating temperature of 23°C (73°F))	or ±0.75°C (±1.5°F) whichever is greater
	Repeatability	$\leq \pm 0.5\%$ of reading or $\leq \pm 1^{\circ}C$ ($\pm 2^{\circ}F$), whichever is greater
	Response Time	250 mSec (95% of reading)
	Spectral Response	8 to 14µm, thermopile detector
	Distance to Spot (D:S)	60:1 (50:1 with Close Focus Option)
	Minimum Measurement Diameter	19mm (0.76 in) [6mm (0.24 in) with Close Focus Option]
	Display Resolution	0.1°C of reading up to 900°C (0.2°F up to 999.8°F)
	Temperature Display	°C or °F selectable
	Ambient Operating Temperature	0°C to 50°C (32°F to 122°F)
	Relative Humidity	10 to 90% RH non-condensing @ up to 30°C (86°F)
	Storage Temperature	-20°C to 50°C (-25°F to 122°F)
	Tripod Mount	1/4-20 UNC
	Power	2 AA Batteries
	Battery Life	8 hrs (13 hrs with photographic mode off) 50 photos, with flash (200 photos, without flash)
	Laser Class II	3-dot laser sighting (Meets IEC Class 2 & FDA Class II requirements)
	Maximum and Minimum Temperature Displayed	
	Differential and Average Temperature	V
	Audible/Visible High and Low Alarm	 ✓
	Bar Graph Display	 ✓
	Adjustable Emissivity* (from 0.1 to 1.0 by 0.01)	✓
	100 Points Data Logging	✓
	Display Hold	✓
	LCD Backlit	✓
	PC Software Operating Systems	Windows 98, 2000 and XP
	Data Graphing & Photo Viewing Software (Windows compatible)	✓
	Data Output: USB or 1mV per degree (°C or °F)	✓ <i>✓</i>
	Weight	480g (1 lb. 6 oz.)
Camera	Maximum Number of 640x480 Pixel Photos (VGA)	26
	Maximum Number of 320x240 Pixel Photos (1/4 VGA)	100
	Recharge Time for Flash	5 sec
	Camera Lens	6 mm (.24 in) approximately equal to 42mm lens on a 35mm camera
	Close-up Distance Focal Point • Far Distance Focal Point	200 mm (7.87 in) • Infinity
	Light Sensitivity	6 lux w/out flash
	Variable Shutter Speed	< 1/15 sec (with flash at 1/15 sec fixed)
	Data Interface	USB 1.1
	Image File Format	.jpg files
ns/ ories	Options	Close Focus Option Subzero Option NIST Calibration Certificate
Uptio Access	Accessories	DataTemp MX Software • USB Computer Cable • Hard Carry Case • Thermocouple K Probe • Thermistor (NTC Probe) • Soft Carry Case

*For more details, visit www.raytek.com/emissivity.htm

Raytek Corporation Worldwide Headquarters 1201 Shaffer Rd. PO Box 1820 Santa Cruz, CA 95061-1820 USA 1 800 866 5478 Tel: 1 831 458 1110 Fax: 1 831 425 4561 solutions@raytek.com

Options/

To find a Raytek office near you please visit www.raytek.com

Worldwide Service

Raytek offers services including emergency repairs and calibration. For more information, contact your local office or e-mail: support@raytek.com





Raytek is an ISO 9001 certified company

for up-to-the-minute features

www.raytek.com

© 2003 Raytek Corporation (1-3001 Rev. D) 11/2003 Raytek, the Raytek logo and DataTemp are registered trademarks, and MX, PhotoTemp and True Dimension are trademarks of Raytek Corp. Windows, Windows 98, 2000, XP and Word are trademarks of Microsoft Corp. Specifications subject to change without notice.