





## **DT-980**

#### HIGH PERFORMANCE THERMAL IMAGER

The Thermal Imager is handheld imaging camera used for predictive maintenance, equipment troubleshooting, and verification. Thermal and visual images are displayed on the LCD and can be saved to a Micro SD Memory card. Transferring images to a PC is accomplished by removing the SD memory card and connecting it to a PC through the included card reader.

In addition to the features mentioned above, the Thermal Imager provide video recording with audio and play back.

DT-980 (80x80) Thermal Imager is designed to make your work easier, more productive and effective.  $80 \times 80$  resolution at 50 Hz for real-time capture; Temperature range from -20°C to 350°C (-4°F to 662°F), 32X continuous zoom, picture-in-picture, voice comment recording and text annotation on images. Hot/Cold spot marker automatically finds the hottest and coldest spots. It includes memory card, Lithium polymer battery & power supply, and USB cable.

#### **Product Characteristics**

High Resolution IR Images: (80x80) Infrared resolution

Visible Light Digital Camera: 5 Megapixels Digital camera resolution with flash provides sharp images regardless of lighting conditions

Picture in Picture: Displays thermal image super-imposed over a digital image

**LED Flashlight**: Allows the visual camera and fusion to be used in poorly lit environments

Wide Temperature Range: From -20 to +350°C targeting electrical and industrial applications ±2% Accuracy reliable temperature measurement

Thumbnail view: Easy to view and analyze images guickly

Audio recorded with the video image: A speaker to listen to audio recorded with the video image

Li-Ion Rechargable Battery: Lasts >4hrs continuous use; replaceable

**HDMI**: HDMI High resolution video output

Inside 100M Memory: About 80pictures or one minute video record Copy to USB: Easy uploads images from camera to USB memory card

Area (Min/Max) Mode: Shows the Minumum or the Maximum Temperature reading in

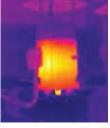
the selected area

Laser Sighting: To aim at the target





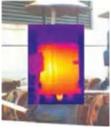
FMC EN: 61326-1 EN: 61010-1



Full Infrared



Color Alarms



Picture-in-Picture



Full visible light

- 3.5" Touch-Screen LCD Display
- Annotate Images with Voice
- Picture-in-Picture
- 32X Continuous Zoom
- Area Min Max with Auto Hot/Cold Mark

### **Specifications**

Imaging and optical data		
Field of view (FOV) /	17°x 17°/ 0.5m	
Minimum focus distance	2.70	
Spatial resolution (IFOV)	3.78mrad	
Thermal sensitivitvy/NETD	< 0.1°C@+30°C (+86°F) / 100 mK	
Image Frequency	50Hz	
Focus mode	Manual	
Zoom	1–32× continuous, digital zoom	
Focal length	9mm	
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 8–14 µm	
IR resolution	80 × 80 pixels	
Image presentation		
Display	2.8 in. LCD, 240 × 320 pixels	
Image modes	IR image, Visual image, Image Fusion	
Color palettes	IRON, Rainbow, Grey, Grey Inverted	
Measurement		
Object temperature range	-20°C to +150°C (-4°F to +302°F)	
	0°C to +350°C (+32°F to +662°F)	
Accuracy	±2°C (±3.6°F) or ±2% of reading	
Measurement analysis		
Spot	Center Spot	
Automatic hot/cold detection	Auto hot or cold markers	
Emissivity correction	Variable from 0.01 to1.0	
Measurement corrections	Emissivity, Reflected temperature	
Storage of Videos		
Storage media	8Gbytes Micra SD card	
Video storage format	Standard MPEG-4 encode, 1280x960@30fps, on memory card > 60 minutes	
Video storage format	IR/visual images; simultaneous storage of IR and visual images	
Storage of Images		
lmage storage format	Standard JPEG, including measurement data, on memory card > 2000 pictures	

Image storage mode	IR/visual images; simultaneous	
image storage mode	storage of IR and visual images	
Set-up		
Laser	< class2	
Set-up commands	Local adaptation of units, language, date and time formats, information of camera	
Languages	multinational	
Digital Camera		
Built-in digital camera	5 Megapixels	
Built-in digital lens data	FOV 59°	
Data communication interfaces		
Interfaces	USB-mini, audio, HDMI	
USB	Data transform between camera and PC Live video between camera and PC	
Video out	HDMI	
Power System		
Battery	Li-ion battery, 4 hours operating time	
Input voltage	DC 5V	
Charging system	In camera (AC adapter)	
Power management	Automatic shutdown	
Environmental data		
Operating temperature range	-20°C to +50°C (-4°F to +122°F)	
Storage temperature range	-40°C to +70°C (-40°F to +158°F)	
Humidity operating & storage	10%~90%	
Drop test	2m	
Bump	25g(IEC60068-2-29)	
Vibration	2g(IEC60068-2-6)	
Physical data		
Camera weight, incl. battery	<500g	
Camera size (L x W x H)	224x77x96	









# **DT-980** High Performance Thermal Imager

Item	Qty.	Description
Thermal Imager	1	
Lens	1	Field of view = 17°x 17°, f = 9mm (in-built)
Li-ion battery	1	3.7V, 2600mAH
Adaptor	1	Input AC Volts: 100V~240V, 50/60HZ, MAX 0.9A. Output DC Volts: 5V, 3500mA
Micro SD	1	8Gbyte
USB cable	1	
HDMI cable	1	
Earphone	1	
Wrist strip	1	
User manual	1	
Warranty Card	1	
PC software installation CD	1	
Gift box & carrying case	1	



### Standard Accessories

Carrying Case, Test Certificate, Testing Leads, Temperature Probe, Battery Charger, Adaptor and Instruction Manual.



