

DT-980Y

DATASHEET



1-Introduction

Overview

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.

2-Specifications

Imaging and optical data	
Field of View (FOV) / Minimum Focus Distance	17°x 17° / 0.5m (9mm) General
	21°x 21° (7.5mm) Wide-angle type
	8°x 8° (19mm) Long focal length type
Spatial Resolution (IFOV)	3.78mrad (9mm) General
	4.53mrad (7.5mm) Wide-angle type
	1.79mrad (19mm) Long focal length type
Thermal Sensitivity/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, Optional 7.5mm/19mm
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)
	0°C to 650°C(32°F to 1202°F) High temperature model
Accuracy	±2°C (±3.6°F) or ±2% of reading(Environment temperature 10°C to 35°C, object temperature > 0°C.)
Measurement Analysis	
Spot	Center Spot
Automatic Hot /Cold Detection	Auto hot or cold markers
Emissivity Correction	Variable from 0.01 to 1.0
Measurement Corrections	Emissivity, Reflected temperature
Storage of Videos	
Storage Media	8Gbytes Micro SD card
Video Storage Format	Standard MPEG-4 encode, 1280x960@30fps, on memory card > 60 minutes
Video Storage Mode	IR/visual images; simultaneous storage of IR and visual images
Storage of Images	
Image Storage Format	Standard JPEG, including measurement data, on memory card > 6000 pictures
Image Storage Mode	IR/visual images; simultaneous 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	-15°C to +50°C (5°F to +122°F)
Storage Temperature Range	-40°C to +70°C (-40°F to +158°F)
Humidity (Operating and 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 × W × H)	224x77x96

3-Packing Lists

Standard Accessories

Item	Quantity	Description
Thermal Imager	1	
Lens	1	Field of view = 17°x 17°, f = 9mm
Li-ion battery	1	3.7V, 2600mAH
Adaptor	1	Input AC Volts: 100V~240V, 50/60HZ, 0.3A Output DC Volts: 5V, 2400mA
Micro SD	1	8Gbyte
USB Cable	1	
USB OTG cable	1	
Non-slip Strap	1	
User Manual	1	
Warranty Card	1	
PC Software Installation CD	1	
Gift Box & Carrying Case	1	