

THERMAL IMAGING CAMERA

TECHNICAL DATA



- Infrared resolution of 80 x 80 (6400 pixels)
- High thermal sensitivity (NETD) of <math><0.1^{\circ}\text{C}</math> @ +30°C (+86°F) / 100mK
- 2.8" colour 240 x 320 pixel LCD display
- Built-in laser and white LED flashlight
- Built-in visible light 5 Megapixel digital camera
- 32X continuous digital zoom
- Infrared and visual images, picture-in-picture, as well as visual image with infrared overlay
- Automatic hot/cold spot indicator
- Automatic level/span function
- Automatic power off
- Choice of four colour palettes including custom
- Video recording with voice annotations
- Micro SD memory card extension possible
- < Class 2 laser
- Set-up Commands: Local adaptation of units, language, date and time formats, information of camera
- Multinational languages
- Includes: lens, li-ion battery, adaptor, micro SD, USB cable, HDMI cable, earphone, wrist strap, PC software & installation CD, and soft carrying case

ORDERING INFORMATION

- R205080 x 80 Thermal Imager
- R2050-3.7V Replacement Battery
- CERTIIR3NIST Calibration Certificate
- R2050-NIST..... Thermal Imager & NIST

Imaging & Optical Data	
IR Resolution	80 x 80 (6400 pixels)
Thermal Sensitivity / NETD	<math><0.1^{\circ}\text{C}</math> @ +30°C (+86°F) / 100 mK
Field of View (FOV) / Min. Focus Distance	17°x 17° / 0.5m
Spatial Resolution (IFOV)	3.78mrad
Image Frequency	50Hz
Focus Mode	Manual
Zoom	1–32x continuous, digital zoom
Focal Length	9mm
Focal Plane Array (FPA) / Spectral Range	Uncooled microbolometer/8–14 μm
Measurement	
Temperature Range	-20°C to +150°C (-4°F to +302°F); 0°C to +350°C (+32°F to +662°F)
Accuracy	$\pm 2^{\circ}\text{C}$ ($\pm 3.6^{\circ}\text{F}$) or $\pm 2\%$ of reading
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
Image Storage & Communications	
Built-in Digital Camera	5 Megapixels
Built-in Digital Lens Data	FOV 59°
Display	2.8" LCD, 240 x 320 pixels
Image Modes	IR image, Visual image, Picture-in-Picture
Color Palettes	IRON, Rainbow, Grey, Grey Inverted
Image Storage Format	Standard JPEG, including measurement data, on memory card > 2000 pictures
Image Storage Mode	IR/visual images; simultaneous storage of IR and visual images
Video Storage	
Storage Media	8GB Micro SD Card
Video Storage Format	Standard MPEG-4 encode, 1280 x 960@30fps, on memory card > 60 minutes
Video Storage Mode	IR/visual images; simultaneous storage of IR and visual images
Data Communication Interfaces	
Interfaces	USB-mini, audio, HDMI
USB	Data transform between camera & PC; Live video between camera and PC
Video Output	HDMI
Power Supply	
Battery	Li-ion battery, 4 hours operating time
Input Voltage	DC 5V
Charging System	In camera (AC adapter)
Power Management	Automatic shutdown
Environmental	
Operating Temperature Range	-20 to +50°C (-4 to +122°F)
Storage Temperature Range	-40 to +70°C (-40 to +158°F)
Humidity (Operating & Storage)	10% to 90%
Drop Tested	2m
Bump / Vibration	25g (IEC60068-2-29) / 2g (IEC60068-2-6)
Dimensions (L x W x H)	8.8 x 3 x 7.8" (224 x 77 x 96mm)
Weight	<math><500\text{g}</math> with battery

**Contact us at 1-877-849-2127
or info@reedinstruments.com**

www.reedinstruments.com