

TECHNICAL DATA

Features

- 160 x 120 infrared resolution (19,200 pixels)
- 2.8" color TFT Display
- Built-in LED flashlight
- Choice of 7 color palettes
- Intuitive on-screen measurement tools
- 3 image modes (Thermal, Visual Image, Thermal Blending)
- High and Low temperature spot and alarm indicators
- IP65 and 6.5' (2m) drop tested
- Rechargeable li-ion battery
- Tripod mountable for continuous long-term monitoring
- View, analyze stored data and generate reports or project in real-time
- Low battery indication and auto shut-off
- Includes USB cable, 32GB micro SD card & soft carrying case

Specifications

Imaging and Optical Specifications

Field of View (FOV):	56 x 42°
Optimal Focal Distance:	0.25m (0.82')
Spatial Resolution:	(IFOV) 6.1 mrad
Thermal Sensitivity (NETD):	<0.05°C (50mK)
Image Capture Frequency:	9Hz
Focus:	Fixed

Measurement

Temperature Range:	14 to 752°F (-10 to 400°C)
Accuracy:	±3.6°F (2°C) or ±2% of reading, for ambient temperature at 77°F (25°C)
Resolution:	0.1°F/°C

Detector Specifications

Detector Type:	Uncooled microbolometer, Focal plane array (UFPA)
Spectral Range:	8 to 14μm
IR Resolution:	160 x 120 (19,200 pixels)



Continued...

TECHNICAL DATA



2.8" color TFT display



160 x 120 infrared resolution
(19,200 pixels)



Built-in LED flashlight

Image Presentation and Measurement Analysis

Display:	2.8" color TFT
Color Palettes:	7 (Ironbow/Rainbow/Rainbow(HC)/Lava/Red-Hot/White-Hot/Black-Hot)
Image Modes:	Thermal, Visual Image, Thermal Blending
On-Screen Temperature Markers:	7 (Center/High Temp/Low Temp/Region of Interest/Up to 3 points)
Center Spot:	Yes
Emissivity:	Adjustable (0.01 to 0.99)
Temperature Alarm Indicators:	High/Low (User adjustable)
Automatic Hot/Cold Detection:	Auto hot or cold spot-meter markers

General Specifications

Digital Camera:	Yes
Digital Camera Resolution:	640 x 480 pixels
Display Resolution:	320 x 240 pixels
Image Format:	BMP
LED Flashlight:	Yes
External Memory:	Micro SD card
Auto Shut-off:	Yes (user adjustable 5/10/30 minutes)
Tripod Mountable:	Yes
Low Battery Indicator:	Yes
Power Supply:	3.7V/5000mAh rechargeable Li-ion battery
Battery Life:	Approx. 6 hours
Charging System:	In Camera
Charge Time:	4 hours
PC Connectivity:	USB Cable (Type-C)

Continued...

TECHNICAL DATA



Software:	Yes (download from website)
Software Functionality:	Image Analysis/ Report Generation/ Live Camera Feed
Software OS Compatibility:	Windows 7/8/10/11
Supported Languages:	English and French
Product Certifications:	CE, IP65, 6.5' (2m) drop test
Operating Temperature:	32 to 122°F (0 to 50°C)
Storage Temperature:	-4 to 140°F (-20 to 60°C)
Operating/Storage Humidity Range:	10 to 90%
Maximum Operating Altitude:	6561' (2000m)
Dimensions:	9.3 x 3 x 3.4" (236 x 76 x 86mm)
Weight:	1lbs (454g)

R2165-KIT

Thermal Imaging Camera Kit

Includes:

R2165 Thermal Imaging Camera,
R8888 Hard Carrying Case with
custom foam interior



Model	Description
R2165	Thermal Imaging Camera
R8888	Medium Hard Carrying Case
R1500	Tripod
RSD-16GB	Micro SD Memory Card w/Adapter, 16GB
R2165-KIT	Thermal Imaging Camera Kit
R2165-NIST	Thermal Imaging Camera with NIST