# REED INSTRUMENTS

# Thermal Imaging Camera
Model **R2168**

TECHNICAL DATA




Features 160 x 120 IR resolution, enhanced to 320 x 240 super resolution, with a 25Hz sensor and 0.05°C thermal sensitivity.

## Features
- 160 x 120 infrared resolution (19,200 pixels)
- 320 x 240 super resolution
- 2.8" color TFT display
- Built-in dual LED flashlight
- 7 selectable color palettes
- Intuitive on-screen measurement tools
- 4 image modes (Thermal, Visual, Picture-in-Picture, T-Mix)
- Video recording capability
- High/Low temperature alarm indicators
- IP65 rated and 6.5' (2m) drop tested
- Rechargeable Li-ion battery
- Tripod mountable for continuous long-term monitoring
- Software for viewing, analyzing data, report generation, and live streaming
- Low battery indicator and auto shut-off
- Includes USB cable

## Applications
- Home and building inspection
- Plant and general maintenance
- Electrical and mechanical inspection
- Predictive maintenance
- HVAC/R and plumbing
- Automotive maintenance
- Solar panel inspection
- Equine and veterinary
- PCBA inspection
- Road construction

**REED Instruments**
1-877-849-2127 | info@reedinstruments.com | www.reedinstruments.com

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WARRANTY 1 YEAR WARRANTY

TECHNICAL DATA

## Specifications

### Imaging and Optical Specifications

| | |
|---|---|
| Field of View (FOV): | 40 x 30° |
| Focal Length: | 0.82' (0.25m) |
| Spatial Resolution: | (IFOV) 4.62 mrad |
| Thermal Sensitivity (NETD): | <0.05°C (50mK) |
| Image Capture Frequency: | 25Hz |
| Focus: | Fixed |

### Measurement

| | |
|---|---|
| Temperature Range: | -4 to 1022°F (-20 to 550°C) |
| Accuracy: | ±3.6°F (2°C) or ±2% of reading |
| Resolution: | 0.1°F/°C/K |

### Detector Specifications

| | |
|---|---|
| Detector Type: | Uncooled microbolometer, Focal plane array (UFPA) |
| Spectral Range: | 8 to 14µm |
| IR Resolution: | 160 x 120 (19,200 pixels) |
| Super Resolution: | 320 x 240 (76,800 pixels) |

### 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: | 4 (Thermal, Visual Image, Picture-in-Picture, T-Mix) |
| On-ScreenTemperature Markers: | 3 (Center/High Temp/Low Temp) |
| Image Measurement Tools: | 5 Points/3 Rectangles (add up to 6) |
| Emissivity: | Adjustable (0.01 to 0.99) |
| Temperature Alarm Indicators: | High/Low (user adjustable) |

### General Specifications

| | |
|---|---|
| Image Capture Mode(s): | 2 (Single/Time-Lapse) |
| Video Capture Mode: | Yes |
| Display Resolution: | 320 x 240 pixels |
| Image Format: | JPG |
| Video Format: | MP4 |
| LED Flashlight: | Yes (Dual) |
| Memory: | Internal (32GB) |
| Auto Shut-off: | Yes (user adjustable 5/10/20/ 30/45/60/90 minutes) |
| Tripod Mountable: | Yes |
| Low Battery Indicator: | Yes |
| Power Supply: | 3.7V/5000mAh rechargeable Li-ion battery |
| Battery Life: | Approximately 8 hours |
| Charge System: | In camera |
| Charge Time: | Approx. 4 hours |
| PC Connectivity: | USB Cable (Type-C) |
| Software: | Yes (download from website) |
| Software Functionality: | Image Analysis/Report Generation/Live Camera Feed |
| Software OS Compatability: | Windows 7/8/10/11 |
| Supported Languages: | English, French, German, Italian and Spanish |
| 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 95% |
| Maximum Operating Altitude: | 6561' (2000m) |
| Dimensions: | 9.3 x 3 x 3.4" (236 x 76 x 86mm) |
| Weight: | 1.3lbs (600g) |

| Model | Description |
|---|---|
| R2168 | Thermal Imaging Camera |
| R8888 | Medium Hard Carrying Case |
| R1500 | Tripod |
| R2168-NIST | Thermal Imaging Camera with NIST |