

# M7816



## Economical, Fully Radiometric, Hand-Held 160x120 Resolution Thermal Imager

Economically priced, easy-to-use, high-performance infrared camera with sizeable 3.5" LCD, and laser pointer for PPM applications



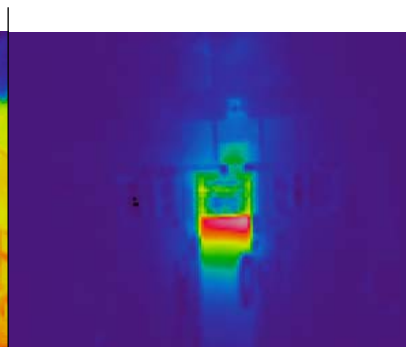
### Features:

- 160 x 120 Resolution UFPA Detector
- Resolution of 0.1°C (at 30°C 60 Hz)
- Temperature Range -40°C to 500°C
- Focus Range of 12" to Infinity
- Weighs 2.9 lbs with Battery
- Laser Pointer
- Transfers Images Using USB 2.0/1.1
- 3.5" Articulating LCD

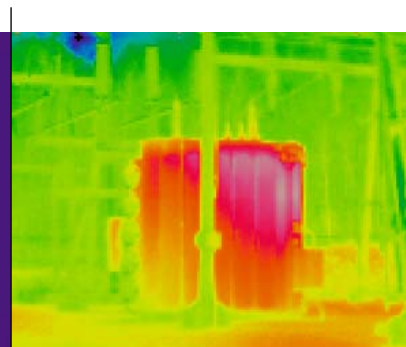
### M7816 Sample Images:



Building Inspection



Overheated Fuse



Transformer



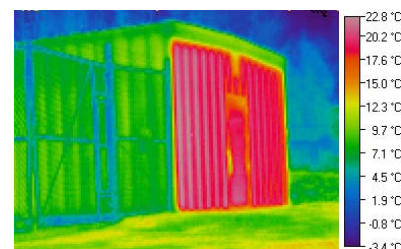
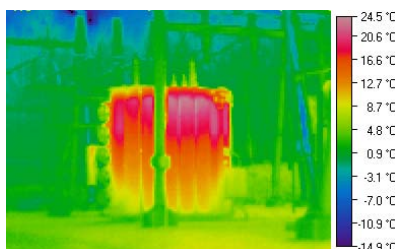
Building Inspection

## Technical Data:

<b>M7816</b>		
<b>Performance</b>	Temperature Range: Measurement Accuracy: Field of View: Focus Range: Instantaneous FOV / Spatial Resolution: Image Update Rate: Resolution: Detector: Spectral Band:	Range 1: -40°C to 120°C (-40°F to 248°F) Range 2: 0°C to 500°C (32°F to 932°F) ±2% or 2°C of reading 18.4°(H) x 14°(V) 30 cm to infinity (12" to infinity) 2 mrad 60 frames per second 0.1°C (at 30°C 60Hz) 160 x 120 Uncooled Focal Plane Array Microbolometer 8.0 to 14.0 µm
<b>Laser Pointer</b>	Classification: Type:	CDRH Class II 650 nm (red) Laser Diode 0.5 mW
<b>Presentation</b>	Display Type: A/D Resolution: B&W/Color Image: Display: Video Output:	3.5" color LCD display 14 bit Several palettes available Date/time; Temperature units °C/°F; Multi-Language; LCD intensity (high/normal/low); Battery Status Indicator; Color Bar; Temperature Range Scale NTSC/PAL composite video signal, S-Video
<b>Measurement</b>	Measuring Functions: Signal to Noise (S/N) Improvement: Image Processing Functions: Emissivity Correction: Environmental Temp. Correction: Background Compensation: Auto Functions:	Run/Freeze Off, S2, S8, S16 Variable level/sense; Single-point temperature display; Single-point emissivity display 0.10 to 1.00 (at 0.01 steps) Provided (including interval NUC) Provided Automatic level and sensitivity; level trace and auto gain control
<b>Image Processing</b>	On-Board Flash Memory: Image Storage Functions: Software:	Stores up to 1500 images (dependent upon the camera configuration) Save individual images; view thermal image gallery (12 thumbnails); replay images; and create, change, delete and rename directories and image files. Downloading and Image Viewing Software included
<b>Interfaces</b>	USB-2.0/1.1: Lemo Connector:	Transfers images and image data to a personal computer (Requires Windows™ XP) Requires standard RCA adapter or S-Video adapter
<b>Environmental</b>	Operating Temperature: Storage Temperature (w/out batteries): Environmental Protection: Shock: Vibration:	-15°C to 50°C 90% Relative Humidity or less (not condensed) -40°C to 70°C 90% Relative Humidity or less (not condensed) IP 54 (IEC60529) 30G (IEC60068-2-27) 3G (IEC60068-2-6)
<b>Power Source</b>	Power Consumption: Battery Type: Battery Operating Time: AC Operation: Power Saving:	Approx. 6W (typical) Li-ion; rechargeable, field replaceable (spare battery included) Approx. 2 hours 30 minutes (display shows battery status) AC adaptor: 100V to 240V, DC 7.2V (nominal) Manual and/or automatic standby mode
<b>Physical Characteristics</b>	Camera Dimensions: Camera Weight: Tripod Mounting:	203.2 mm x 228.6 mm x 101.6 mm (8" x 9" x 4") 1.3 kg including battery (2.9 lbs. including battery) Standard, 1/4" - 20



**Standard Accessories:** (2) Li-Ion Batteries, Smart Battery Charger, AC Adapter and DC Interface Cable, USB Cable, Lens Cap, Shippable Carrying Case, Downloader Software, Neck Strap, Operating Manual on CD, Lemo to RCA or Lemo to SVideo Adapter.



Mikron reserves the right to change specifications to reflect the latest changes in technology and improvements at any time without notice. These changes will be reflected in subsequent editions of our literature when warranted.

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