

IR Thermal Imaging Miracle MobIR® M4

Imaging Performance	
THERMAL	
Detector Type	Focal plane array (FPA) uncooled microbolometer ; 160×120 pixels, 35µm
Spectral Range	8 to 14µm
Field of View	25°×19°
Thermal Sensitivity	≤ 120mk at 30°C
Image Frequency	50Hz PAL/60 NTSC, non-interlaced
Electronic Zoom	×2
VISUAL	
Built- in Digital Video colors	CMOS Sensor, 640 x 480 pixels, 2 ²⁴ colors
Image Presentation	
External Display	2.2" TFT & 1.2" CSTN high resolution color LCD
Display Color	256 level, 8 palettes (Rainbow, iron, B&W, etc)
Video Output	PAL/NTSC, composite video
Measurement	
Temperature Range	-20°C to +250°C
Accuracy	±2°C or ±2% of reading
Measurement Modes	Spot / manual (up to 4 moveable), spot / automatic placement at max, area (up to 4 moveable) displaying either max, min, or average, isotherm, line profile, auto alarm
Emissivity Correction	Variable from 0.01 to 1.00 (in 0.01 increment)
Measurement Features	Automatic correction based on user input for reflected ambient temperature, distance, relative humidity, atmospheric transmission and external optics
Image Storage	
Type	Built-in Flash Memory
Capacity	600 images
File Format	IRI (An individual file consists of infrared image, visual image and voice annotation if any)
Voice Annotation	Variant for different files, up to 30 seconds per file
System Status Indication	
LCD Display	Shows status of battery, indication of power
Sound Alarm	Automatic alarm for power shortage
Laser Locator	
Classification Type	Class 2 semiconductor laser
Battery System	
Type	Li-ion battery, rechargeable, field replaceable
Operating time	Over 2 hours continuous operation
Charging System	In camera via USB interface from AC adapter (96 – 250 VAC) or in battery charger
Power Dissipation	2W
Environmental Specification	
Operating Temperature	-10°C to +50°C
Storage Temperature	-20°C to +60°C
Humidity	Operating and storing 10% to 95%, non-condensing
Encapsulation	IP54
Shock	Operational: 25G, IEC 68-2-29
Vibration	Operational: 2G, IEC 68-2-6
Interfaces	
USB1.1	Image (thermal & visual), measurement, voice and digital video transfer to PC
Physical Characteristics	
Size	120mm×60mm×30mm (standard model)
Weight	0.265kg (including battery)
Color	2 colors alternative