

Specifications

Imaging performance	Thermal	
	Field of view (FOV) *	23° horizontal x 17° vertical
	Spatial resolution (IFOV) *	1.30 mrad
	Min focus distance*	0.15 m
	Thermal sensitivity (NETD)	Ti55: ≤ 0.05 °C at 30 °C Ti50: ≤ 0.07 °C at 30 °C
	Detector data acquisition / Image frequency 60 Hz / 30 Hz Focus	SmartFocus; one finger continuous focus
	IR digital zoom	Ti55: 2x, 4x, 8x Ti50: 2x
	Detector type	320 x 240 Focal Plane Array, Vanadium Oxide (VOx) Uncooled Microbolometer with 25 micron pitch
	Spectral band	8 μm to 14 μm
	Digital image enhancement Automatic full-time enhanced Visual (Fusion models only)	Automatic full-time enhanced
	On camera operating modes	Full Thermal, full visual light or merged thermal-visual images. Picture-in-Picture
	Visible light camera	1280 x 1024 pixels, full color
	Visible light digital zoom	Ti55: 2x, 4x, 8x Ti50: 2x
Temperature measurement	Calibrated temperature range	Ti55: -20 °C to 600 °C (-4 to 1112 °F) in 3 ranges Ti50: -20 °C to 350 °C (-4 to 662 °F) in 2 ranges
	Range 1	Ti55: -20 °C to 100 °C (-4 to 212 °F)
		Ti50: -20 °C to 100 °C (-4 to 212 °F)
	Range 2	Ti55: -20 °C to 350 °C (-4 to 662 °F)
		Ti50: -20 °C to 350 °C (-4 to 662 °F)
	Range 3	Ti55: 250 °C to 600 °C (482 to 1112 °F)
	Accuracy	±2 °C or 2 % (whichever is greater)
	Measurement modes	Ti55: Centerpoint, center box (area min/max, average), moveable spots/boxes, user defined field/text annotations, isotherms, automatic hot and cold point detection, visible color alarm above and below
Ti50: Centerpoint, center box (area min/max, average)		
Emissivity correction	0.1 to 1.0 (0.01 increments)	
Image presentation	Digital display	5" large high-resolution digital display
	LCD backlight	Sunlight readable color LCD
	Video output	RS170 EIA/NTSC or CCIR/PAL composite video
	Palettes	Grayscale, grayscale inverted, blue red, high contrast, hot metal, ironbow, amber, amber inverted
	54 mm Telephoto lens	High precision Germanium lens
	Field of view (FOV)	9 ° horizontal x 6 ° vertical

Optional lenses	Spatial resolution (IFOV)	0.47 mrad
	Min focus distance	0.6 m
	10.5 mm wide angle lens	High precision Germanium lens
	Field of view (FOV)	42 ° horizontal x 32 ° vertical
	Spatial resolution (IFOV)	2.45 mrad
	Min focus distance	0.3 m
Image and data storage	Storage medium	Compact flash card stores over 1000 IR images (512 MB card standard)
	File formats supported	14 bit measurement data included. Exportable JPEG, BMP, PCX, PNG, PSD.
Interfaces and software	Interface	Compact flash card reader included
	Software	SmartView; Full analysis and reporting software included
Laser (IR-Fusion models only)	Classification	Class II
	Laser targeting	Laser dot visible on screen when blending thermal and visible image
Controls and adjustments	Set-up controls	Date/time, temperature units C/F, language, scale, LCD intensity (high/normal/low)
	Image controls	Level, span, auto adjust (continuous/manual)
	On-screen indicators	Battery status, target emissivity, background temperature and real time clock
Power	Battery type	Li-Ion smart battery, rechargeable, field-replaceable
	Battery operating time	3 hours continuous operation (2 hours for models with IR-Fusion)
	Battery charging	2 bay intelligent charger powered via AC outlet
	AC operation	AC adapter 110/220 VAC, 50/60 Hz (Ti55 only)
	Power saving	Automatic shutdown and sleep modes (user specified)
Environmental and mechanical design	Operating temperature	-10 °C to +50 °C (14 °F to 122 °F)
	Storage temperature	-40 °C to +70 °C (-40 °F to 158 °F)
	Relative humidity	Operating and storage 10 % to 95 %, non-condensing
	Water and dust resistant	IP54
	Weight (including batteries)	1.95 kg (4.3 lbs)
	Camera size (HxWxD)	162 x 262 x 101 mm (6.5" x 10.5" x 4.0")

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