

High Performance Thermal Imager



Specification Table

Parameter	Range
Imaging and Optical Data	
IR Resolution	160 × 120 pixels
Field of View (FOV)	29.8° × 22.6°
Minimum Focus Distance	200mm
Spatial resolution (IFOV)	3.33mrad
Thermal Sensitivity (NETD)	< 0.08°C @ +30°C (+86°F) / 80mK
Image frequency	50Hz
Focus Mode	Manual
Zoom	1 ~ 20x continuous, Digital Zoom
Rotate	0° - 360°, Continuous Increase by 1°
Focal Length	7.5mm
Focal Plane Array (FPA)	Uncooled Microbolometer
Spectral Range	8 - 14μm
Image Presentation	
Display	Capacitive Touch Screen, 3.5 Inch LCD, 320 × 240 pixels
Image Modes	IR Image, Visual Image, Picture in Picture, Image Fusion
Picture in Picture	IR Area on Visual Image or Visual Image Area on IR
Color Palettes	IRON, IRON Inverted, Rainbow, Grey, Grey Inverted, Feather
Storage of Videos	
Storage Media	4GB Micro SD Card
Video Storage Format	Standard MPEG-4 Encode, 640x480 @ 30fps, On Memory Card > 60 minutes
Video Storage Mode	IR/Visual Images; Simultaneous Storage of IR and Visual Images
Storage of Images	
Image Storage Format	Standard JPEG, Including Measurement Data, On Memory Card > 1000 Pictures
Image Storage Mode	IR/Visual Images; Simultaneous Storage of IR and Visual Images

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Parameter	Range
Measurements	
Object Temperature Range	-20°C to +150°C (+4°F to +302°F)
	0°C to +400°C (+32°F to +752°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading
Digital Camera	
Built-in Digital Camera	640 × 480 pixels
Built-in Digital Lens Data	FOV 62.3°
Digital Communication Interfaces	
Interfaces	USB-Mini, Audio, Composite Video, Micro SD Slot
USB	Data Transform between Camera and PC
Video Out	Composite (PAL and NTSC)
Power System	
Battery	Lithium Polymer Battery, 4.5 Hours Operating Time
Input Voltage	DC 9V to 12V
Charging System	In Camera (AC Adapter)
Power Management	Automatic Shutdown & Sleep Mode (User Selectable)
Environment Data	
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Storage Temperature	-40°C to +70°C (-40°F to +158°F)
Humidity (Operating & Storage)	10% ~ 90%
Encapsulation	IP65
Drop Test	2m
Bump	25g (IEC 60068-2-29)
Vibration	2g (IEC 60068-2-6)
Physical Data	
Camera Weight (Including Battery)	920g
Camera Size (L × W × H)	243mm × 103mm × 160mm

Part Number Table

Description	Part Number
High Performance Thermal Imager	ST-9875

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