

HD Dual Mode Thermal Camera

THC-51D-HD

The Zistos® HD Dual Mode Thermal Camera combines the benefits of remote thermal imaging and low-light, black & white video into a compact enclosure.

FEATURES

- Rugged, weather-resistant housing
- Built-in covert infrared illumination for the B/W mode
- Instantaneously switch between Thermal and BW video camera
- Built-in microphone and amplifier
- Suited for both tactical and rescue missions
- Small size allows access through 2-inch core holes
- Radiometrics (temperature gauge and colorization)
- Compatible with only ZistosHD Systems
- Full 30Hz thermal frame rate
- Supports Talkback with the AAM-TB-HD¹



HD DUAL MODE THERMAL CAMERA

Specifications

PHYSICAL SPECS

Dimensions	1.95in (d) x 6.13in (l); 50mm (d) x 156mm (l)	Weight	.76lbs (.34kg)
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ENVIRONMENTAL SPECS

Operating Temperature Range	14° to 113°F (-10° to 45°C)	IP Rating/Submersibility	IP66 (weather resistant, not submersible)
Storage Temperature Range	-4° to 140°F (-20° to 60°C)		

CAMERA SPECS

Sensor Type	Uncooled Microbolometer (thermal) CMOS CCIQ III Hybrid Camera (BW)	Pixel Size	12µm thermal
		Sensor Size	1/3.7in BW
Lux	0.02 (BW) @15fps	Sensor Resolution	320 (h) x240 (v) thermal; 640 (h) x480 (v) BW
Thermal Sensitivity	<40mK	Streaming Resolution	640(h) x 480(v) @30FPS
Illumination	6 IR LEDs (in BW mode)	LED Wavelength/Power	940nm (invisible)/180 mw/sr
Lens	8.7mm thermal; 4.3mm BW	Field of View - Horizontal	50° thermal & BW

PERFORMANCE SPECS

Effective Distance in Good Ambient Light	8in to 40ft + (.20cm to 12M+) BW mode	Range to Detect Human Activity	1.5ft to 330ft/.5Mto 100M thermal
Effective Distance in Complete Darkness	8in to 20ft + (.20cm to 6M+) BW mode	Runtime²	6hr 30 min in BW mode w/illumination 7hr 20min in thermal mode

ORDERING INFORMATION

DESCRIPTION

THC-51D-HD	HD Dual Mode Thermal Camera
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NOTES:

1. Cameras manufactured after August 2021.
2. System runtime shown is with BAT-15XL; BAT-1 is half of runtime shown.



BLACK AND WHITE MODE



THERMAL MODE

Specifications

TEMPERATURE SETTINGS	COLORIZATION TABLE		
	IMAGE COLOR	CELSIUS	FAHRENHEIT
LOW RANGE¹	Grey	— to 55°	— to 131°
Typically used for all applications other than fire fighting	Yellow	55° to 75°	131° to 167°
	Orange	75° to 100°	167° to 212°
	Red	100° to 230°	212° to 446°
	Grey	230° to —	446 to —
HIGH RANGE¹	White	— to 260°	— to 500°
Typically used for fire fighting	Yellow	260° to 427°	500° to 800°
	Orange	427° to 538°	800° to 1000°
	Red	538° to 600°	1000° to 1112°
	Red	600° to —	1112° to —
ORDERING INFORMATION	DESCRIPTION	TEMPERATURE SCALE	TEMPERATURE SETTING
THC-51D-HD	Dual Mode Thermal Camera	Fahrenheit	Low Range ¹
THC-51DC-HD	Dual Mode Thermal Camera	Celsius	Low Range ¹
THC-51DH-HD	Dual Mode Thermal Camera	Fahrenheit	High Range ²
THC-51DCH-HD	Dual Mode Thermal Camera	Celsius	High Range ²

NOTES:

1. Other custom ranges available upon request.

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