



"Thermal Imagers Beyond Compare"

MANTIS

SPECTRAL SERIES

The Mantis Spectral Series is HurleyIR's latest product-series offering in advanced multi-spectral imaging. The Mantis Spectral Series are tactical, automated, security imaging systems using HurleyIR's proprietary signal processing resulting in extremely clear images. HurleyIR cameras are Mil Spec 810G shock and vibration rated and environmentally sealed multi-spectral ruggedized systems. The considerable payload capacity can be configured with just about any combination of optics, cameras and other sensors. HurleyIR's advanced state-of-the-art thermal imaging with an integrated high resolution and high performance day night camera provides full surveillance capability in any condition.

The Mantis Spectral II boasts long range non-cryogenic thermal sensors, resulting in zero maintenance and high reliability. The Mantis Spectral II is configurable for, but not limited to, vehicle/vessel, rapid deployment, and base security platforms, giving it incredible ability to meet the tactical mission requirements. These imaging systems feature continuous zoom and autofocus imagers to allow for a variety of fields of view in each spectrum. The system also includes a gyro stabilized pan and tilt positioning system resulting in a very steady image in a large range of vibration frequencies. The Mantis Spectral II can integrate with a large assortment of other peripheral sensors and cameras while being operated at the imaging site or remotely from multiple command points. This is possible because each member of the Mantis Spectral Series is fully TASS, ONVIF or PELCO compliant and is capable of operating using multiple, open control protocols. The Mantis Spectral II can detect a human target at 11km and a vehicle target at 22km.



MANTIS Spectral II Specifications

High Definition Visual Color Camera	
Effective Pixels (approx.)	2.1 Megapixels
FOY	64°- 2° (Optical) 2° - .3° (Digital)
Optical Zoom	30x
Digital Zoom	12x (360x with Optical)
Minimum Illumination	0.0008 lx
IR Cut Filter	ON/OFF
Electronic Iris	ON/OFF
Day & Night	Auto
Digital Noise Reduction	ON/OFF
Focus	Auto
Aperture Compensation	ON/OFF
Fog Cutter	OFF/HIGH/MED/LOW (Sees through fog)
Non-Cryogenic High Resolution Thermal Camera	
Pixel Size	12um
Array	640x480
Spectral Range	LWIR (SWIR or MWIR optional)
Optical Zoom	1 to 17.5° HFOV Continuous Zoom
Sensor Frame Rate	60 Hz
Focus	Auto Focus
Video Output	NTSC (PAL Ethernet and Wireless optional)
Image Polarity	White Hot or Black Hot
Image Processing	Histogram/AGC
Detection*	11km (Man) 22km (Vehicle)
Sensitivity	<50mk NETD
Positioner	
Pan/Tilt Speed	0.01 to 300°/sec
Tilt Angle	±75° (Adjusted for application)
Pan Angle	360° Continuous
Position Accuracy	Within ± 0. 10°
Position Reliability	±0.0 1 °
Resolution	0.005°
Backlash	Zero
Stabilization	Gyro Stabilized with <i>Smart Stabilizer Software</i> (<1.0 milliradian RMS)
System Specifications	
Operating Voltage	24VDC 120VAC-60Hz OR 230 VAC-50Hz
Current Draw	5 amps Typical (11 Amps peak)
Operating Temperature	-50c to 75c (-50°F to +160°F)
Storage Temperature	-50°F to + 160°F
Weight	LRTI head (34lbs), Positioner (44lbs), LRF (10lbs)
Optional Laser Designator/ Illuminator	
	830nm
Class	Class IIIb NOHD 333m unaided eye
Beam Divergence	.01 – 6.5
Power Output	90 miliwatts
Visibility	Visibility with NVG's and I2 devices, invisible with naked eye
Nominal Ocular Hazard Distance	333m
Output Modes	Low, High, Pulse 4Hz
Range	20km pointer, 7km illuminator

Optional Laser Range Finder	
Wavelength	1,565 to 1,570 nm (1,570 nominal)
Output	<8mJ
Ranging Rate	Single shot 1Hz burst
Range	20km
MANTIS Accessories	
System operated in PELCO, TASS and ONVIF Protocol utilizing joystick hand controller. High-end analytic software integrated. Viewing and recording compatible on monitor. Interface box, thick-gauged 60ft. main cable, carrying case, and bench test kit included.	

Supplied by :

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