

FLIR M500

High Performance Marine Multi-Sensor Camera System



 **FLIR**[®]

FLIR M500

The FLIR M500 cooled thermal night vision camera is our most technologically advanced M-Series camera ever. Designed around a cryogenically cooled Mid Wave Infrared (MWIR) thermal sensor, it excels at both short and ultra-long range target detection and identification. The M500 includes a cooled midwave, high resolution 640 x 512 pixel thermal camera with a 1X to 14X continuous optical zoom and a field of view between 28° and 2°. It also comes with an integrated HD color visible camera system and a spot-beam LED target illumination system. Built on a ruggedized marine gimbal system, the M500 is a pan and tilt capable camera with standard gyro stabilization, video tracking and radar integration.



High intensity LED spot light

HD color lowlight camera with 30x optical zoom

Cooled MWIR Thermal imager with 640 x 512 resolution and 14X Optical Zoom

Gyro-stabilized to ensure steady viewing in heavy sea conditions.

Rugged, waterproof gimbal enclosure with 360° pan and +/-90° tilt capability

Digital Detail Enhancement (DDE) assures a crisp thermal image, even in scenes with extreme temperature dynamics.



Detail in zoom image



Zoom Before



Zoom After with Video Tracking

Short and Long-Range Detection

Recognize marine traffic and key landmarks at night

- Continuous variable zoom allows you to easily identify vessels or navigation aids at distance
- Quickly recognize nearby buoys in channels or open water
- Detect key landmarks, such as islands or docks

Thermal and Visible-Light Payloads

Combination thermal detection and visible identification

- UUp to 14X Optical Thermal Zoom from 28° to 2° HFOV
- HD Color 30X Zoom provides 64° to 2.3° HFOV
- Illuminate and identify nearby targets with powerful LED beam

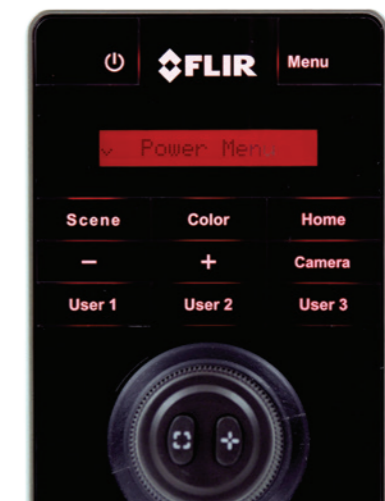
Enhanced Target Identification

Operators can precisely locate and track objects

- Gyro-stabilization creates smooth video in rough water
- Radar integration lets the M500 follow specific radar targets
- Standard video tracking allows the M500 to automatically follow any target in the thermal or visible camera's field of view

Digital Detail Enhancement (DDE) assures a crisp thermal image, even in scenes with extreme temperature dynamics.

Easy-to-use Joystick Control Unit



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Technical Specifications



M500 SERIES

DETECTOR	
Detector Type	Cooled MWIR InSb 640x512 Focal Plane Array
NETD	<30mK
Spectral Response	3µm – 5µm
Array Format	640x512
Pixel Pitch	15µm
Frame Rate	25 Hz - PAL / 30 Hz – NTSC
IR OPTIC	
Optical Zoom	1X to 14X Continuous
Field of View Limits Optical	28° x 21° WFOV / 2° x 1.5° NFOV
Digital Zoom	1X to 4X
COLOR CAMERA	
Visible Sensor	1/2.8" CMOS
Array Format	1920x1080
Field of View Limits Optical	63.7° x 35.8° WFOV / 2.3° x 1.29° NFOV
Digital Zoom	1X to 12X
VIDEO PROCESSING	
Output Modes	Black hot, white hot, false color palettes
Contrast Enhancement	AGC or manual, histogram equalization, local contrast enhancement algorithms available
Sharpness Enhancement	Automatic, adjustable Digital Detail Enhancement
Overlays	Integrated graphics overlays to indicate azimuth, AGC, active camera and menu control
INTERFACES	
NMEA0183	TCP/IP, RS-422, NMEA 0183, Pelco D
Video Formats	NTSC or PAL NTSC or PAL, 720p30, 1080p30
Video over Ethernet	2 channels of streaming MPEG-4, H.264 or M-JPEG
Video Interface	Analog video, HD-SDI
Power Consumption	250W (max w/heaters)
Input Voltage	12 VDC to 24 VDC (-10%+30% per IEC 60945)
Communications	TCP/IP, RS-422, Pelco D
OPERATIONAL	
Operating temp	-25°C to +55°C
Storage temp	-50 °C to +80°C
PHYSICAL	
Size	15.65"H x 10.75"W
Weight	45 lbs

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The World's Sixth Sense™