FLIR

MARINE CAMERAS WITH ACTIVE GYRO STABILIZATION

FLIR M300 Series

The M300 Series sets a new standard for safe marine navigation and situational awareness. Applying enhanced stabilization technology to high-performance visible, thermal, or multispectral imaging, M300 Series marine cameras deliver unwavering vision in high-stakes environments.

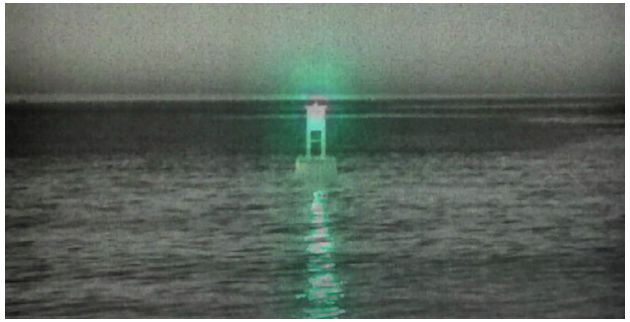
With options for any marine application, the M300 Series offers outstanding vision in the most grueling conditions. Three unique sensor combinations on the M300 Series give captains total control over their vision. The **M300C** captures high definition visible imaging and uses a 30x optical zoom to monitor distant targets. **M332** and **M364** dedicated thermal cameras capture excellent vision in complete darkness, blinding glare, and light fog. The **M364C** and **M364C-LR** combine visible and thermal sensors, leveraging FLIR Color Thermal Vision™ (CTV) and MSX™ for an elite level of awareness on the water.

THERMAL AND VISIBLE OPTIONS
The M300 Series offers single-sensor visible and thermal models, as well as dual-sensor, multispectral systems.

RUGGED DESIGN
Designed to withstand punishing weather and high seas with robust shock protection and an IP56-rated housing.

TOTAL CONTROL
Active gyro-stabilization and continuous 360° panning offer complete awareness in any direction.

SEAMLESS INTEGRATION
Exceptional connectivity with navigation displays from leading marine electronic brands and security systems.



SAFER NAVIGATION

The M300 Series makes nighttime navigation even safer and less stressful. FLIR thermal technology gives captains the power to see clearly in total darkness, glaring light, and light fog.

FLIR COLOR THERMAL VISION®

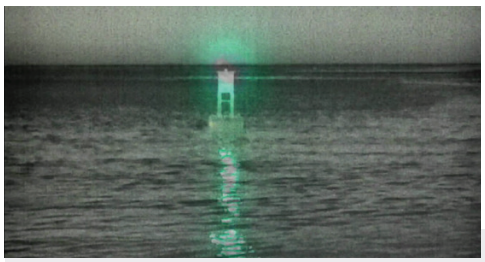
Exclusive FLIR Color Thermal Vision blends visible camera details with a thermal image, overlaying vital color imagery that allows captains to positively identify navigation aids and other vessels within the thermal scene.

	M300C	M332	M364	M364C	M364C LR
Thermal Sensor	N/A	Boson 320	Boson 640	Boson 640	Boson 640
Visible Camera	Low Light HD Visible 30x Zoom	N/A	N/A	Low Light HD Visible 30x Zoom	Low Light HD Visible 30x Zoom

PREMIUM MULTISPECTRAL MARINE CAMERAS WITH ACTIVE GYRO-STABILIZATION

FLIR M364C
M364C LR

Featuring a high definition low light camera and one of the most advanced FLIR thermal imaging cores, the M364C and M364C LR provide an elite level of awareness on the water. Both cameras use multispectral imaging to deliver exclusive FLIR Color Thermal Vision™ (CTV) technology when used with Raymarine Axiom™ MFDs. Color Thermal Vision blends visible camera details with a thermal image, overlaying vital color imagery that allows captains to positively identify navigation aids and other vessels within the thermal scene. Outstanding imaging performance and enhanced gyro-stabilization make the M364C and M364C LR indispensable tools for law enforcement professionals, commercial mariners, and serious recreational boaters.



ELITE AWARENESS WITH MULTISPECTRAL IMAGING

Thermal and visible imaging featuring FLIR Color Thermal Vision and MSX®

- FLIR Boson 640 × 512 thermal sensor
- Thermal imaging detects objects in complete darkness, glare, and light fog
- Integrate the M364C with Raymarine Axiom and take advantage of FLIR Color Thermal Vision and MSX multispectral imaging.
- Color Thermal Vision blends thermal and the low light visible camera so captains can easily identify color details like navigational lights and navigation aids

HIGH DEFINITION NAVIGATION

Low light HD visible imaging sensor and long-range zoom offer enhanced target identification.

- Better than binoculars, the M364C with 30x optical zoom and image stabilization delivers superior long-range imaging and positive target identification
- Ultra-low light camera technology provides visible imagery in the most challenging lighting conditions
- Overlay AIS targets, chart objects, and waypoints in real time when combined with Raymarine Axiom and award-winning ClearCruise™ augmented reality technology

A STEADY VIEW IN ROUGH SEAS

Steady, stable viewing in heavy seas keeps eyes on-target.

- Two-axis mechanical stabilization virtually eliminates the effects of pitch, heave, and yaw
- Horizontal stabilization automatically keeps the camera positioned in the same direction as the vessel turns
- Integrated AHRS (Attitude Heading Reference Sensor)

SPECIFICATIONS

Thermal Camera	M364C	M364C LR
Detector Type	640x512 VOx Microbolometer	
Video Refresh Rate	30 Hz or <9 Hz	
Field of View	24 ° x 18 °	18 ° x 13.5 °
Focal Length	18 mm	25 mm
Focus	Fixed 12 ft (3m) to infinity	
Optical Zoom	N/A	
E-Zoom	4x Continuous	
Image Processing	FLIR Proprietary Digital Detail Enhancement	
Visible Camera		
Detector Type	1/2.8" Exmor R CMOS	
Lines of Resolution	High Definition up to 1080/30p	
Minimum Illumination	0.1 lux (50 IRE, 1/30s, ICR off, slow shutter off, high sensitivity off) / 0.0008 lux (30 IRE, ICR on, slow shutter 1/4s, high sensitivity on)	
Zoom	30× Optical Zoom	
E-Zoom	12x	
Focal Length	129 mm to 4.3 mm	
Field of View	Optical 63.7° x 35.8° WFOV to 2.3° x 1.29° NFOV	
System Specifications		
Gyro Stabilized	Yes	
ClearCruise Augmented Reality	Yes, with Raymarine Axiom	
Pan/Tilt Adjustment Range	360° Continuous Pan, +/- 90° Tilt	
Analog Video Output	NTSC	
Analog Video Connector Types	BNC	
Network Video Output	Dual H.264 IP Network Video Streams	
HD-SDI Lossless Video Output	Yes	
Power Requirements	12 to 24 VDC	
Power Consumption	41 W typical, 56 W typical (with heaters on.) Note: FLIR recommends using a 75 W power supply	

Environmental	M364C	M364C LR
Operating Temperature Range	-13°F to +131°F (-25°C to +55°C)	
Storage Temperature Range	-30°F to +158°F (-30°C to +70°C)	
Automatic Window Defrost	Standard at Power-Up	
Sand/Dust Ingress	Mil-Std-810E or IP6X	
Water Ingress	IPX6 (heavy seas, power jets of water)	
Shock	15g vertical, 9g horizontal	
Vibration	IEC60945	
Lightning Protection	Standard	
Salt Mist	IEC60945	
Wind	100 knots (115.2 MPH)	
EMI	IEC60945	
Physical		
Weight	6.3 kg (13.9 lb) without mounting riser; 6.75 kg (14.9 lb) with mounting riser.	
Size	Camera: Base diameter: 222.2 mm (8.7 in.) Height: 328.3 mm (12.9 in.) Camera attached to mounting riser: Base diameter (with seal): 254.0 mm (10.0 in.) Height: 365.5 mm (14.4 in.)	
Range Performance		
Person in the Water	2,700ft (823m)	4,900ft (1,494m)
Small Vessel	1.2nm (2.2km)	2.1nm (3.9km)