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.

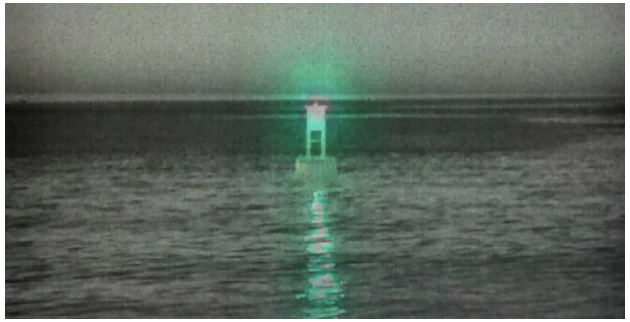
RUGGED DESIGN
Designed to withstand punishing weather and high seas with robust shock protection and an IP56-rated housing.

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

MARINE THERMAL CAMERAS WITH ACTIVE GYRO-STABILIZATION

FLIR M332/M364

Pairing a rugged, all-weather design with one of the most advanced FLIR thermal imaging cores, the M332 and M364 deliver awareness-enhancing thermal vision for law enforcement, commercial, and recreational applications. Advanced gyro-stabilization and high-performance thermal imaging detect obstacles and targets in complete darkness and heavy seas, allowing safe navigation in the most challenging conditions.

SAFE NAVIGATION IN LOW VISIBILITY ENVIRONMENTS

Thermal imaging offers vision in complete darkness, glare, and light fog.

- Powered by the breakthrough FLIR Boson thermal imaging core
- Thermal resolution up to 640 × 512
- Smooth image refresh rates up to 30 Hz
- Advanced onboard image processing technology
- ClearCruise Augmented Reality-enabled when paired with Raymarine Axiom MFDs

A STEADY VIEW IN ROUGH SEAS

Stable viewing in heavy seas keeps eyes on-target.

- Two-axis mechanical stabilization virtually eliminates the effects of pitch, heave, and yaw
- Integrated AHRS (Attitude Heading Reference Sensor)
- Horizontal stabilization automatically keeps the camera on scene as you maneuver.

SEAMLESS INTEGRATION

Exceptional connectivity with navigation and security systems.

- Optional joystick control unit and multifunction navigation display integration
- ONVIF-compliant for PTZ security camera functionality
- H.264 IP video stream, HD-SDI lossless, and analog video output

SPECIFICATIONS

Thermal Camera	M332	M364
Detector Type	320x256 VOx Microbolometer	640x512 VOx Microbolometer
Video Refresh Rate	30 Hz or <9 Hz	30 Hz or <9 Hz
Field of View	24 ° x 18 °	24 ° x 18 °
Focal Length	9.1mm	18 mm
Focus	Fixed 12 ft (3m) to infinity	Fixed 12 ft (3m) to infinity
Optical Zoom	N/A	N/A
E-Zoom	4x Continuous	
Image Processing	FLIR Proprietary Digital Detail Enhancement	FLIR Proprietary Digital Detail Enhancement

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	Single H.264 IP Network Video Stream
HD-SDI Lossless Video Output	Yes
Power Requirements	12 to 24VDC
Power Consumption	41 W typical, 56 W typical (with heaters on.) Note: FLIR recommends using a 75 W power supply

Environmental	M332	M364
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	M332	M364
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	~1,500 ft (457 m)	2,700ft (823m)
Small Vessel	~0.67 nm (1.3 km)	1.2nm (2.2km)