### **\$FLIR**



### 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.

www.flir.com/m300-series



# 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  $640 \times 512$
- 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.

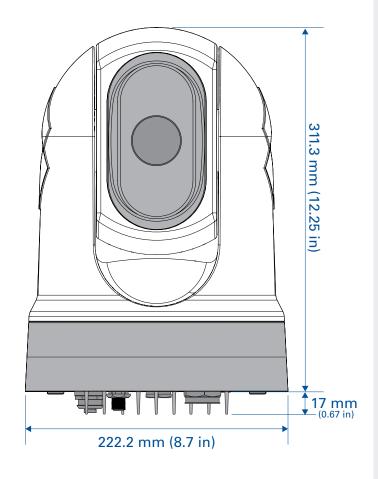
- Optional joystick control unit and multifunction navigation display integration
- ONVIF-compliant for PTZ security camera functionality
- H.264 IP video stream, HD-SDI lossless, and analog video output

#### **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	

	Enhancement	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
2		
Operating Temperature Range	-13°F to +131°F	(-25°C to +55°C)
		(-25°C to +55°C) (-30°C to +70°C)
Operating Temperature Range	-30°F to +158°F	·
Operating Temperature Range Storage Temperature Range	-30°F to +158°F Standard a	(-30°C to +70°C)
Operating Temperature Range Storage Temperature Range Automatic Window Defrost	-30°F to +158°F Standard a Mil-Std-8	(-30°C to +70°C) t Power-Up
Operating Temperature Range Storage Temperature Range Automatic Window Defrost Sand/Dust Ingress	-30°F to +158°F Standard a Mil-Std-8 IPX6 (heavy seas, p	(-30°C to +70°C) t Power-Up
Operating Temperature Range Storage Temperature Range Automatic Window Defrost Sand/Dust Ingress Water Ingress	-30°F to +158°F Standard a Mil-Std-8' IPX6 (heavy seas, p 15g vertical,	(-30°C to +70°C) t Power-Up 10E or IP6X sower jets of water)
Operating Temperature Range Storage Temperature Range Automatic Window Defrost Sand/Dust Ingress Water Ingress Shock	-30°F to +158°F Standard a Mil-Std-8° IPX6 (heavy seas, p 15g vertical,	(-30°C to +70°C) t Power-Up 10E or IP6X tower jets of water) 9g horizontal

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)



 $Specifications \ are \ subject \ to \ change \ without \ notice. \ For \ the \ most \ up-to-date \ specs, \ go \ to \ www.flir.com$ 

100 knots (115.2 MPH)

IEC60945

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