

# FLIR MU- / MV-series

## Ultra long-range multi-sensor thermal night vision system

**FLIR MU-series** is the most technologically advanced thermal night vision system available to the maritime industry today. It is a powerful, gyro-stabilized multi-sensor, long range, thermal night vision system.

MU-602C includes a cooled midwave, high-resolution 640 x 512 pixel thermal camera. It has a 14X optical zoom between a 28° and a 2° field of view. It comes standard with a high-resolution 550-line color camera. The daylight camera offers a 28X optical zoom.

MU-602CL is also equipped with a low-light black and white camera.

MU-602CLW is completed with an uncooled long-wave high resolution 640 x 480 pixel thermal camera giving the MU-Series multi-spectral capabilities. Ideal for detecting targets at short range.

**FLIR MV-series** offer a thermal imaging camera equipped with an uncooled Vanadium Oxide (VOx) detector producing thermal images of 640 x 480 pixels. It is the more affordable multi-sensor solution. The thermal imaging camera zooms between a 24.5° and a 4° field of view.

MV-604C is equipped with a thermal imaging camera and a visible color camera.

MV-604CL comes with a black & white low light camera as well.





## Continuous optical zoom

The FLIR MU- / MV-series have a continuous optical zoom on the thermal image allowing to have a closer look at objects which are far away.



## Ball up / Ball down installation

The FLIR MU- / MV-series can be installed in ball-up or ball-down position, giving you more flexibility installing it on your vessel.

## Key Features:

- **Pan/tilt:** all versions of the MU- / MV-Series can pan 360° continuously and tilt +/- 90°. This provides excellent situational awareness.
- **Active gyro-stabilization:** provides steady imagery, even in rough seas; this is critical for getting the most out of the FLIR MU- / MV-Series long-range imaging capability.
- **Radar tracking:** allows operators to use the FLIR MU- / MV-Series to identify and track specified radar returns, enhancing vessel safety in low visibility conditions.
- **Video tracker:** the user can select a given target that can be automatically tracked by the video tracker. Selecting and engaging in tracking mode is easily done by the touch of a button. Once the tracker is engaged, the camera will follow the object as long as it can be seen.
- **Picture-in Picture mode:** with the Picture-in-Picture mode (PIP) two sensors can be displayed on a single display. The user can select which sensor to display as full screen.
- **Digital detail enhancement (DDE):** assures a crisp thermal image even in scenes with extreme temperature dynamics.



Video tracker



Picture-in-picture

## MU-/MV-series Joystick Control Unit

Ergonomic, effortless control of all functions, even in rough conditions. Multiple joysticks can be connected.



### Different versions available

	MU-602C	MU-602CL	MU-602CLW	MV-604C	MV-604CL
Sensor type	Focal Plane Array (FPA), Cooled MWIR 640 x 512 pixels			Focal Plane Array (FPA), Uncooled LWIR 640 x 480 pixels	
FOV (Field of View)	Continuous Optical Zoom WFOV 28° x 22.4° to NFOV 2° x 1.6°			Continuous Optical Zoom WFOV 24.5° x 18.5° to NFOV 4.1° x 3.1°	
Focus	Focus free at infinity/Manual/Auto/Wide				
Visible color camera	✓	✓	✓	✓	✓
Lowlight camera		✓	✓		✓
Thermal LW camera			✓		
Detect man-sized target		9.2 km		4.4 km	
Detect small vessel		15.5 km		12.7 km	

**Payload 1**  
visible color camera

**Payload 2**  
MU-series:  
cooled 640x512  
thermal imaging  
camera  
MV-series:  
uncooled 640x480  
thermal imaging  
camera



**Payload 3**  
MU-602CL/CLW  
MV-604CL:  
low-light b/w  
camera

**Payload 4**  
MU-602CLW:  
wide field of view  
uncooled longwave  
infrared, 640  
x 480 thermal  
camera



Color camera and lowlight camera:  
Picture-in-Picture



Both the MU- / MV-Series allow you to zoom in  
and have a closer look at the situation.