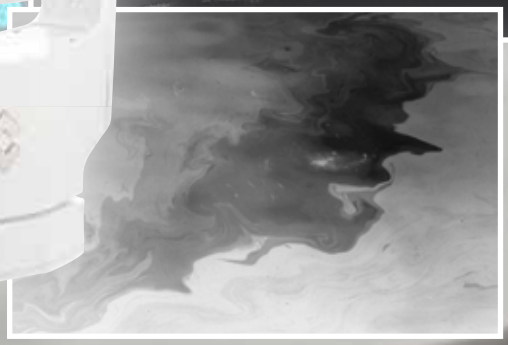
FLIR®



Navigation
Security
Emergency
Oil Spill
Ice Detection
Anti Piracy

FLIR maritime infrared thermal night vision cameras

FLIR cameras open a wide range of possibilities for the seaman and can, to some extend, be considered the greatest breakthrough since the introduction of the Radar. It is a new sensor that can provide detailed information in areas where excisting sensors have limitations. This is also why the technology has found its way to several official authorities like coastguards and SAR vessels, where the FLIR camera today is installed as standard.

HM-Series

Handheld and affordable sensors. Suitable for oil spill detection and other tasks that do not require high resolution and long range.

M-Series

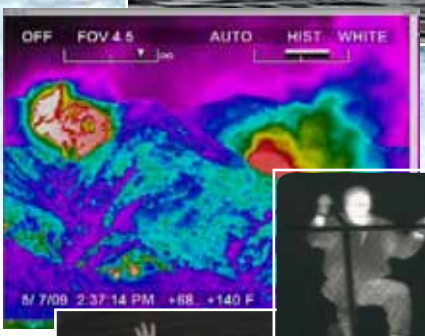
This series gives the perfect combination of price and capability. Comfortable range and two axis 360/90 degrees rotation. Also available with a low-light camera.

Voyager II

The high-end product with superior range and quality. Two thermal imaging cameras and one daylight/lowlight-camera.

Burnside Bridge,
Normal nighttime image

Burnside Bridge,
Thermal image



How it works

The camera has a speciel and temperature sensitive infrared optic build in a robust housing. The special optic measure temperature differences in the area. All elements, engines, steel and humans all emits energy as infrared radiation (heat radiation) which is electromagnetic radiation in the wavelength between visible light (about 0.7 microns) and microwaves (about 1 mm). A heated body radiates energy in the form of infrared radiation.

The sensitive optic is able to register differences in temperature down to 0.1°C. The camera projects the differences in temparature to a grayscale or color picture - called a thermal image.

Core benefits from FLIR

Search and Rescue
Thermal night vision cameras can help you find a person in the water faster than any other night vision technology. That is why more coastguards, police agencies, and military forces around the world put their trust in FLIR for search and rescue than all other brands combined.

Oil Spill Detection
The equipment is ideal for oil spill detection e.g. the portable infrared camera is a precious tool for the duty officer searching for possible oil spills during a loading/discharging operation at the terminal.

Threat Detection
The FLIR camera can help increase the early warning period for pirate attacks. Even during dusk and daytime the FLIR camera can be useful and can serve as an important tool for video documentation of the attack.

Security
The general effeciency of surveillance onboard the ship is greatly enhanced with the help from thermal imaging cameras. Both at nighttime and daytime it is very easy to detect uninvited visitors trying to gain access to the ship or its cargo.

Navigation
Approaching harbour areas with dense traffic in reduced visibility can be a challenge for most navigators. Thermal night vision cameras make navigation safer with crystal-clear video, give a much better overview of the port situation and help identifying various unidentified targets on the radar PPI.

Ice Detection
Navigating in arctic and other cold areas FLIR can prove a valuable partner. FLIR can detect ice on distances that make any navigator much more comfortable securing safe passage through dangerous waters.

FLIR - a part of FURUNO's integrated systems

It is possible to connect FLIR products with FURUNO's integrated navigational systems like the FAR-21x7 display systems.

By combining FLIR with other navigational sensors, like Radar and GPS it is possible to achieve an optimal presentation of the environment around the ship.

By correlating the different outputs from the vessel's sensors it is much easier to interpret the information at hand.

With electronic charts, radar images and compass bearings you can quickly identify buoys, vessels, liferafts and other objects of importance - a key to safer and better seamanship.