

MARINE OBSERVER™

Marine Observer by Toyon is a state-of-the-art maritime infrared camera system developed to support whale conservation efforts and oil and gas operations.

A custom-built camera houses multiple stabilized long-wave infrared (LWIR) camera cores paired with an AI powered supporting detection software with stabilized video processing for superior maritime detection.

CAMERA SPECIFICATIONS:

- Camera module comprised of multiple uncooled long-wave infrared (LWIR) camera cores.
- Custom weatherproof camera enclosure.
- Each camera core provides a resolution of 640×512 pixels at 30 frames per second (30 Hz).
- Wide field-of-view options available. Up to 90° with a combined resolution of up to of 3840×512 pixels.
- Multiple cameras can be installed together to extend the field-of-view coverage up to 360°.
- Includes a synchronized inertial navigation system to provide electronic stabilization of the infrared (IR) imagery.
- Easily connects directly to a computer running the detection software.

FEATURES INCLUDE:

Reduces Risks to Whales: Marine Observer can automatically detect whales in real-time to help alert vessel crew and prevent strikes.

Automatically Detects: Marine Observer was designed to automatically detect marine mammals, but can also detect vessels or other targets.

Around-the-clock Surveillance: Extend operating times with infrared cameras that provide detection 24/7.

Video Data: Review streaming infrared video and verify detections in real time while simultaneously recording the data. Stored video can be retrieved and reprocessed at a later date for further analysis.

Stationary Land or Vessel Mounted Options

Available: Easy integration onto any vessel or use on land for endless versatility.

Wide Field of View: Provides wide field-of-view coverage with a high update rate (30 Hz).

Easy Operation: Easy to use camera and intuitive software. The Marine Observer system can be operated by a single analyst.



Screen shot of Marine Observer software. Red box indicates an automatically detected whale blow.



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