



WAVcam[®] Overview

The WAVcam System provides wide area persistent coverage, high resolution imagery and video change detection, using visible light and infrared sensors. The System may include a day sensor, night sensor, video processor, video archive and viewing software. In general, the WAVcam is suitable for use in monitoring outdoor venues of up to 75+ square miles with a single sensor.

WAVcam vs. Other Panoramic Systems - WAVcam is not:

- A rotating head
- A very large camera array
- A fisheye lens
- A mirror lens
- A panoramic camera + a long range slew-to-queue camera

WAVcam uses beam steering technology developed by ISA. The WAVcam assembles a WAV (wide area view) by placing up to 41 high definition images side-by-side.

WAVcam Systems - There are 5 primary Systems, with numerous variations.

1. VIS-200: visible light only
2. MWIR-250: midwave IR only
3. LWIR-66: longwave IR only
4. VIS/MWIR: combination visible light and midwave IR
5. VIS/LWIR: combination visible light and longwave IR

Other System components are the video processor(s), archive unit(s), power supply(s) and mounting bracket(s).

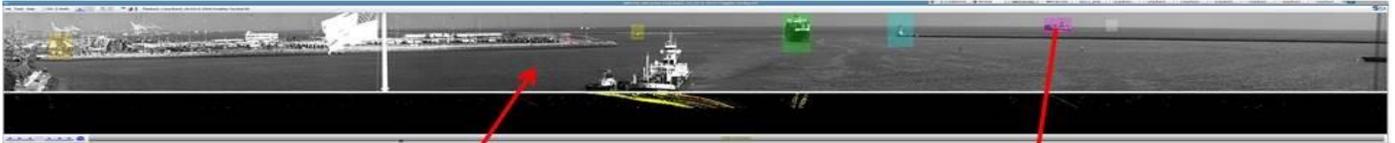
The entire wide area view, at full resolution, is archived for a user-specified period of time or a user-specified amount of data storage.

The visible light (VIS) WAVcam provides real time, black and white video surveillance over a 90° HFOV. There are two thermal sensors. Both sensors provide real time video surveillance over a 90° HFOV. The midwave sensor is cryogenically cooled, the longwave sensor is not.

Via the Built-in Viewer:

- Playback may be controlled by the user via a graphical user interface.
- The user may select multiple targets within the wide angle view.
- Each target may be displayed in its own non-modal window at the full, native resolution.
- Each target window is color coded to a bounding box in the wide area view showing the relationship of target window's FOV to the entire WAV.
- The user may make "clips" of the complete dataset collected by the system over a user designated period of time.
- The user may make a "movie" in real time or post-incident of any portion of the recorded data at its full, native resolution.

WAVcam Viewer Screenshots



Persistent, 90°, panoramic view up to 75² miles.

High spatial resolution at distance. →



Domain Awareness

Three companies have integrated the WAVcam into their user interface.

1. The Mariner Group
2. SSR Engineering
3. Raytheon

This augmented reality gives the end user the ability to correlate WAVcam targets with radar tracks, AIS information, physical security sensors and other security/surveillance subsystems. The resulting domain awareness is highly useful when trying to compile multiple, disparate pieces of information into actionable intelligence.

WAVcam Visible Light and Midwave Pair

