

The **V14 MSII** is fully-digital, lightweight multi-sensor imaging device designed to provide exceptional surveillance and detection capabilities for all law enforcement, military and public utilities applications. The MSII combines the latest in IR and high-definition EO sensor technology and incorporates a proprietary high-performance computer, HD video processor and power conditioning unit, the HDU-900. This unit works seamlessly with the MSII's touch-screen console controller, allowing simplified user input, control monitoring of all system features. This powerful combination allows the system to support a multitude of features and provide numerous payload and interface options. With the system's unparalleled EO and IR sensor technology, superior lens stabilization, unmatched continuous zoom capabilities and multiple payload options, the V14 MSII delivers high-performance, flawlessly precise images making it ideal for any mission, day or night.



## Key Features and Benefits

### Standard

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- Complete Console System Control
  - Eliminates need to install an additional panel mounted controller, reducing panel clutter and simplifying installations
- HD-Overlay
  - Status information is displayed directly on the HD monitor, allowing user clear situational awareness
- Video Switching
  - Multiple HD-SDI / SDI / and Analog video input / outputs
- Power Conditioning
  - Provides clean power for the gimbal, cameras, monitors and related equipment, improving system reliability
- HD/SD Conversion
  - SD images automatically up-converted for HD display
  - HD images can be down-converted for display, storage and transmission on low speed / low resolution devices
- Scan conversion (1080 to 720)
  - High-quality "cross-conversion" ensuring compatibility
- Digital Zoom for HD image
  - Up to 1000% (10x) digital zoom of HD or IR image
  - Up to 10% (-10x) digital shrink

### Optional

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- Geo-Pointing
  - Provides calculations required to automatically steer the gimbal to a fixed location
- DVR (continuous loop recording / H.264 encoding and/or JPEG2000)
  - Hard-Disk based recorder providing continuous recording of image, along with meta-data information on location and system settings
  - Up to 10 hours record time
- Frame Grab with cabin accessible SD card input (USB) drive
  - Ability to capture full resolution image, including meta-data on image location and system setting (requires DVR option)
  - Three Frame-Grab Options:
    - Single frame-grab: capture a single picture
    - Scene Selection: capture a series of single frames to create a scene
    - Video Clip: capture specific video segments
- Image Blending (HD Daylight and IR)
  - Ability to display both HD and IR images on the same HD monitor. Images may be combined (overlying one another with color key feature), or display in same inset window utilizing PIP (picture in picture)

# consistency

# versatility

# precision



## System Specifications

System Type	5-axis gyro-stabilized multi-sensor
Turret Size (H x W x L)	19.5" x 14.5" x 19"
Turret Weight	<72 lbs.
Azimuth Coverage	360° Continuous
Elevation Coverage	+32° to -155°
Roll Coverage	+/- 20° (HD sensor only)
Slew Rate	>55° /sec

## Thermal Imager

Sensor Type	640 x 512 15µm pitch focal plane array
Wavelength	Cooled 3-5µm InSB
Output	NTSC/PAL
Fields of View: 3 (FOV's)	31.5° x 24.0° 9.10° x 6.90° 2.70° x 2.06°

## HD Daylight Imager

Camera	Sony HDC-1500
Imaging Device	3-CCD 2/3"
Effective Pixels	1920(H) x 1080(V)
Aspect Ratio	16:9
Frame Rates	1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P
Sensitivity	F10 at 2000 lx (3200k, 89.9% reflectance)
Focal Length	16.5mm to 825mm
Magnification	50x optical (up to 600x with digital)
Field of View	32.40° x 18.60° (16.5mm) to 0.7° x 0.4° (825mm)

## Laser Rangefinder Option

Laser Type	Erbium-glass
Wavelength	1.54 microns
Pulse Rate	12 PPM (1-Hz optional)
Range Resolution	+/- 5 m
Min/Max Range	50 meters / 20 Km

## Power

Input Voltage	28 Vdc +/- 10%
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## Additional System Options

Video Auto Tracker (Both IR and HD)	Software auto-tracker integrated into HDU-900
Integrated Moving Map	Moving map software Integrated into HDU-900

# SENSPEX

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