



vMSIS3-USD-C2500-T

vMSIS3-USD-C2500-T - Vlatacom Multi Sensor Imaging System 3 - Uncooled Standard Definition

Product Description

The vMSIS3-USD-C2500-T is a state-of-the-art monitoring and surveillance system that integrates two high resolution imaging sensors and provides ultra-long range target detection, recognition, and identification based on highly advanced sensors, optics, and image processing. The system consists of an uncooled ShortWave InfraRed SWIR standard definition imager, a color low light day/night high definition imager. Both of them employ ultra-long range optics and a real-time image stabilization system. The system utilizes a pan/tilt platform with gyro-stabilization. The entire system operates in a large temperature range and various climatic conditions. The entire system can be controlled, monitored, and have its parameters adjusted from a remote/local control center or an optional control console.

The SWIR imager improves target visualization and tracking in tough atmospheric and weather conditions (e.g. fog and smoke). The color low light imager provides additional details during day and low-light conditions. Optional video stabilization, image enhancement, video-tracking, motion detection algorithms, and mapping toolkit are also available. Additionally, the system can include optional components like an: eye-safe laser rangefinder, a digital magnetic compass, and a GPS.

Key Features

- Modular multi-sensor high resolution imaging system
- Superior uncooled SWIR standard definition imager
- Powerful continuous zoom SWIR lens with maximum focal length 2500mm
- Ultra-long range color low-light high definition imager with optical stabilization
- Crisp high resolution image
- Excellent range performance
- High-performance T-shaped gyro stabilized pan-tilt unit
- Remotely or locally controlled
- Optional control and monitoring console with one or three monitors
- Rugged enclosure
- 24/7/365 operation
- Optional features: video stabilization, image enhancement, video tracking, motion detection algorithms and mapping toolkit



Extreme fog conditions - Left: Visible, Right - SWIR

Key Benefits and Additional Applications

- Uncooled short wavelength infrared imager with 2500mm optics has superb range performance
- Ultra-long range color low light imager with optical stabilization

Specifications:

SWIR imager		Color low light imager	
Array format:	640 x 512 pixels	Array format:	1974 x 1110 pixels
Detector type:	InGaAs 2D array	Detector type:	Single CMOS / RGB Bayer
Resolution:	640 x 512	Resolution:	2.2 Megapixels
Pixel pitch:	15µm	Pixel size:	5µm
Spectral band:	0.4µm to 1.7µm; 0.9µm to 1.7µm	Sensor sensitivity:	<0.0025lx
Noise (RMS):	<195 electrons Low Gain; <50 electrons High Gain	Minimal subject illumination:	0.04lx (F4, 30 fps, 50IRE, +72db, color) (Night level 2 - half moon or cloudy full moon equivalent)
Optics:	Motorized continuous zoom lens	Optics:	Motorized continuous zoom lens
Focal length:	500mm - 2500mm	Focal length:	16mm - 2000mm, with motorized 2x extender
		Optical stabilization:	ON/OFF
Laser rangefinder - optional		Pan tilt platform	
Range:	10 km for target 2.3m x 2.3m	Azimuth movement range:	N x 360°
Wavelength:	1.54µm	Elevation movement range:	From -15° to + 15°
Range of measurement:	80m to 20,000m	Azimuth speed range:	From 0.005°/sec to 60°/sec
Fully Eye-safe:	Class 1	Elevation speed range:	From 0.005°/sec to 60°/sec
General		Operating console (optional)	
Interface:	Ethernet 100/1000BaseT	Displays:	1 - 3 depending on choice
Power supply/Consumption:	24VDC or 230VAC (with connection box) 300W	Resolution:	Up to full HD (1920 x 1080)
Dimensions (WxDxH):	848mm x 711mm x 543mm		
Weight:	78.5kg (without connection box)		
Operational temperature:	-25°C to 55°C		



Advanced tracking system



Digital stabilization and image enhancement (Left: OFF, Right:ON)

Detection, Recognition, Identification Range Calculations (*)	
Human	
	Geometric calculation* 
Vehicle	
	Geometric calculation* 

(*) Geometrical calculation for system IFOV (pixel size / maximum focal length).

Actual range may vary depending on environmental conditions, camera set-up, type of display and user experience.

Disclaimer: Subject to change without notice.



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