

Clarity. Accuracy. Reliability.



Features

- Uncooled 8-14 μ m Infrared Sensor
- Field-of-View Ranges:
 - 4.3°-21.3° (Single)
 - 21.3°/5.4° (Dual)
 - 29.0°/7.3° (Dual)
- Available 26x Zoom Visible Camera
- Dry Nitrogen Backfilled
- Integrated Vector Pan-Tilt System
- 2-Axis Gyro-Stabilization
- Integrated Controller and Joystick
- Remote Controlled
- Auto and Manual Focus
- Multiple Color Palettes

Marinized Multi-Sensor Systems

Uncooled Short- to Mid-Range Camera Systems

General Dynamics' Marinized Multi-Sensor Systems are rugged, stabilized electro-optical infrared (EO/IR) camera systems designed to perform in tough maritime environments. Whether day or night, in rough seas or congested harbors, these systems deliver increased situational awareness and improve response time and maneuverability.

The systems are available with a wide range of single- or dual-field-of-view infrared sensor options to meet a variety of mission needs. The electro-optical camera is available as a single-field-of-view matched to the infrared sensor or with a continuous 26X zoom. To deliver stable, precise imagery in rough seas and at high speeds, the integrated Vector-20 pan-tilt system provides auto, manual and coxswain gyro-stabilization modes.

The Marinized Multi-Sensor Systems' dry-nitrogen pressurized housing meets IP67 standards to ensure performance in harsh maritime environments. The multi-sensor systems and in-dash controls are ready out of the box and easily integrated onto any vessel.

Marinized Multi-Sensor Systems

SYSTEM SPECIFICATIONS

Video Format	NTSC/PAL/Differential
Serial Interface	RS-422
Power Requirements	10-32 VDC
Environmental	Environmentally sealed to IP67 standard Unit sealed and dry nitrogen backfilled Front Element Defroster Operating Temp Range: -32°C to +60°C Non-Operating Temp Range: -40°C to +71°C
Controls	Controls available on a panel-mount joystick and keypad Proportional Pan and Tilt speed controls Focus (Auto/Manual) Stabilization mode Autoscan with 10 tables of 10 user-defined camera presets, variable speed, dwell, and selection
Weight	~32 lbs. (14.5kg) (Pan/tilt head & sensor)
Length	10.5" (26.6cm)
Width	8.4" (21.5cm)
Height	16.6" (42.3cm)

VISIBLE CAMERA CHARACTERISTICS

25mm, 37.5mm & 50mm Focal Lengths

Sensor	Sony Super HAD CCD
Field-of-View FOV	Matched to nominal thermal camera (±10%)
Resolution	550 TV lines
Min. Illumination	<0.2 lux
Signal to Noise	> 45dB

75mm, 100mm & 20mm/80mm Focal Lengths

Sensor	1/4" IT CCD (Super HAD), Approx. 630k Pixels (NTSC), Approx. 740k Pixels (PAL)
Field-of-View	Continuous 26X optical zoom, 42° to 1.6°
Digital Zoom	12X
Resolution	470 TV lines NTSC (460 PAL)
Min. Illumination	< 2.0 lux (1/60 sec), 0.05 lux (1/4 sec)
Signal to Noise	> 50dB

Manufacturer reserves the right to change specifications to reflect latest changes in technology and improvements at any time without notice. Export is subject to U.S. Government regulations.



DS5-812-3a

THERMAL CAMERA CHARACTERISTICS

Detector	Option 1: 320 x 240 Uncooled VOx Microbolometer FPA Option 2: 640x480 Uncooled VOx Microbolometer FPA
Spectral Band	8–14µm
Type	Motorized Remote Focus Optical System
f/#	1.0
Controls/Features	Inverse Polarity Auto Focus Manual Gain/Offset

VECTOR-20 PAN-TILT SYSTEM

Pan	360° continuous
Tilt	-90° to +30° minimum
Accuracy	0.1°
Repeatability	0.02°
Position Rate	Pan < 0.1° to >60°/second Tilt < 0.1° to >60°/second
Stabilization	Pan < 2mrad RMS Tilt < 2mrad RMS

CAMERA CONFIGURATIONS

System Name	Focal Length	Field-of-View	Detector
VU-25M	25mm	17.1° x 12.9°	Option 1
VU-37M	37.5mm	11.5° x 8.6°	Option 1
VU-50M	50mm	8.6° x 6.5°	Option 1
VU-75M	75mm	5.7° x 4.3°	Option 1
VU-80M	20/80mm	5.4° x 4.0° (N) 21.3° x 16.1° (W)	Option 1
VU-80M	20/80mm	7.3° x 5.7° (N) 29.0° x 21.8° (W)	Option 2
VU-100M	100mm	4.3° x 3.2°	Option 1

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