GENERAL DYNAMICS

Mission Systems

"VENOM 3U" VPX Integrated Processor for Sonobuoys



The UYS-505 utilizes 3U VPX, an enhanced module standard which provides powerful processing in a compact form factor.

The new State-Of-The-Art

The UYS-505 "VENOM 3U" is the revolutionary next-generation Acoustic Processor from General Dynamics, the world-leader in Sonobuoy Processing innovation.

VENOM 3U leverages the latest advances in signal processing technologies to maximize the detection of modern submerged threats, while minimizing Size, Weight, Power and Cooling (SWAP–C) for airborne installation. The fixed- wing variant processes up to 32 sonobuoys, while the rotary- wing version can process up to 16 sonobuoys in addition to its embedded control of dipping sonar.



General Dynamics' latest Sonobuoy Processing software – including Passive and Active Energy Maps and powerful tracking algorithms – is designed to enhance tactical awareness while significantly reducing operator workload. A new feature is "CUDA" (Computerized Underwater Detection Assistant), an "APP" designed to automatically assess the tactical picture in noisy littoral regions without operator intervention.

Technical Information

VENOM 3U builds upon General Dynamics' years of sonobuoy processing experience to provide enhanced detection tools and the world's most advanced sonobuoy processing system.



Features:

- Processing of any passive or active sonobuoy in fleet use
- Control of Command Function Select (CFS) Sonobuoys
- Intuitive Operator Machine Interface (OMI)
- Concurrent processing of over 100,000 spectral cells
- Specialized tools for Diesel Submarine detection
- Optimized detection of transient target sources
- Wideband coverage for active intercept
- Scalable geographic display with tactical overlays
- Embedded training module
- STANAG 4283-compliant recording

VENOM 3U incorporates Intel® Core™ i7 quad-core processing to power the latest advances in acoustic processing, including coherent and impulsive Multi-Static Active (MSA) and automatic active feature tracker.



The UYS-505 shown beside previous generation UYS-504

	UYS-505			UYS-504			
Unit Size	Width	Height	Depth	Width	Height	Depth	Reduced by 83%
	5"	8"	13"	15"	11"	19"	
	12.7 cm	20.3 cm	33.0 cm	38.1 cm	27.9 cm	48.3 cm	
Weight	26 lbs / 11.8 Kgs			67 lbs / 30.5 Kgs			Reduced by 61%
Power Consumption	150 Watts			319 Watts			Reduced by 53%

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