



SUBNERO M25M SERIES MODEMS

Versatile connectivity for a diverse set of applications

APPLICATIONS

- ✓ Versatile, acoustic smart modem for offshore, marine, subsea and defense domains.
- ✓ Subsea sensor networks for offshore monitoring
- ✓ Marine robot integration for telemetry and control
- ✓ Ideal for subsea research and testing



○ BEST-IN-CLASS PERFORMANCE

Up to 15 kbps or over 4 km range in challenging littoral waters.

○ SOFTWARE-DEFINED DESIGN

Flexible, in-field configurable performance powered by UnetStack.

○ AUVS & SENSORS

Robust links to enable supervised autonomy and remote control for AUVs and subsea sensors.

○ MULTI-RECEIVER OPTION

Enhanced performance through spatial diversity combining.

○ JANUS COMPATIBILITY

Fully compliant with NATO JANUS standard for interoperability.

○ BUILT-IN NETWORKING

Integrated network stack for large-scale underwater networks.



M25M SERIES MODEMS

The M25M series modem is the dependable workhorse of the Gen4X series, designed for versatility across a wide range of applications. Balancing data rate, range, and robustness, it provides a reliable foundation for marine robotics, and sensor networks.

TECHNICAL SPECIFICATION

COMMUNICATION

Modulation (software defined)	PSK-OFDM, FH-BFSK
FEC (Forward Error Correction)	LDPC, BCH, Convolution code
JANUS support	Yes
Bandwidth	12 kHz (20 - 32 kHz)

SOFTWARE

Framework	UnetStack
User Interface	Interactive web UI
Software Interfaces	Java, Groovy, Python, C, JavaScript, Julia, JSON/TCP

ELECTRICAL

Power source	18 - 30 VDC (24 VDC recommended)
Power consumption	< 4 W (receive mode, nominal) < 45 W (transmit mode, avg.) < 150 mW (sleep mode) < 1 mW (deep sleep mode)
Wake up modes	Acoustic wake up External electrical interrupt Scheduled wake up
External interface	Ethernet (10/100 Mbps), RS232
On-board storage	256 GB, 1 TB
Receive channels	1, 2 (configurable at the time of purchase)

MECHANICAL

Hull material	Aluminum, Stainless steel, Titanium
Depth rating	300 m, 2000 m, 4000 m, 6000 m
Dimensions	SC: \varnothing 100 x 303 mm, OC: \varnothing 88 x 137 mm
Weight (in air / water)	SC: 2.1 / 0.8 kg, OC: 0.65 kg / NA
Available Configurations	Standalone Configuration (SC) Open Configuration (OC)

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