

Wireless Mesh for Maritime Applications

GoSubsea Marine Mesh Node is a portable Wireless Mesh Network Node optimized for use on maritime vessels, rigs and structures. The unit is a rugged, wireless device that forms a mesh network when used in conjunction with other GoSubsea Marine Mesh Nodes.

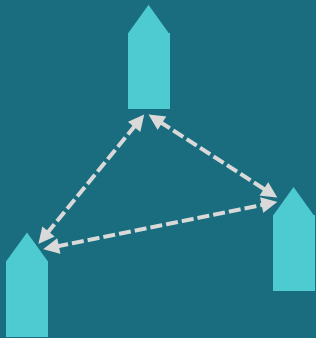
Each Node contains two transceivers and is configured for 2 antennas (can be set up for 4). It provides Ethernet and Wi-Fi Access Point interfaces to enable data, voice, and video applications between Nodes at different locations.

To optimize user experience and installation, all Nodes are delivered with a dedicated indoor unit containing laptop, serial server, video converters, spares and accessories.

The outdoor unit is delivered complete with robust maritime mounting accessories for Mesh Radio and antennas and all required cables are included to ensure efficiency during system mobilization.

BENEFITS

- **Self-configuring operation for fast and easy deployments**
- **High bandwidth for data, voice, and video applications**
- **Scalability to large number of units**
- **Rugged and environmentally sealed enclosure**
- **All parts included in kit for fast and easy mobilization**



SPECIFICATONS

Frequency	2.402 — 2.472 GHz (WiFi Channel 1-11)
Modulation	DSSS, CCK, OFDM
Max. Physical Layer Data Rate	300 Mbps (throughput varies)
Max. RF Transmit Power	29 dBm ± 2 dB
Receive Sensitivity	Varying between -96 dBm ±1 dB and -73 dBm ±2 dB
Network Functionality	VLAN and QoS support; Access Point; Bridge; Gateway; DHCP; NAT and Port Forwarding; Automatic Protocol Tunneling (APT).
Security	<ul style="list-style-type: none"> • Multiple cryptographic options, including NSA Suite B algorithms (implementation not certified). • Separately configurable data and MAC address encryption via AES256-GCM, AES192-GCM, AES128-GCM, AES256-CTR, AES192-CTR, AES128-CTR, XSalsa20, XSalsa20/12, and XSalsa20/8. • Configurable per-hop, per-packet authentication between Nodes via AES256-GMAC, AES192-GMAC, AES128-GMAC, HMAC-SHA512, HMAC-SHA384, HMAC-SHA256, HMAC-SHA224, HMAC-SHA1, and Poly-1305-AES. • Supports IEEE 802.11i: AES-CCMP and TKIP encryption, WPA-Personal/Enterprise, WPA2-Personal/Enterprise, 802.1x; 64/128-bit WEP; Access Control Lists; Compatible with Layer-2 and Layer-3 client/server and peer-to-peer security solutions; Compatible with Harris SecNet 54® encryption
Outdoor Unit: Input Voltage (via PoE)	110/220VAC
Outdoor Unit: Power Consumption	5.5 W (average, idle); 19 W (maximum, peak) @ 24 V
Indoor Unit: Standard Interfacing	1 x Laptop for configuration, viewing and data transfer 4 ch RS-232 (via Moxa Nport 5410) 4 ch Composite Video Encoder 5 ch Ethernet Switch (Data, IP Video, aso.) (Optional: HDMI to IP converter, other converters on request.)
Physical dimensions & weight	Indoor Unit (case): 55 x 35 x 23 cm @ 17,5 kg Outdoor Unit (case): 83 x 47 x 28 cm @ 24 kg

