

## Wireless Mesh Network Gateway

SeaSmart Wireless Mesh Network Gateways link multiple SeaGauge sensor hubs and controllers to provide local browser based monitoring and optional global internet access. A single gateway can support multiple nodes using "Zigbee-like" wireless links. Mesh networks utilize local neighbors to extend ranges across several miles and "self -heal" if any node goes off-line.

SeaSmart Wireless Mesh Network Gateways offer an economical solution to building out large sensor networks by centralizing the network access point in a single location. The gateway automatically links to all compatible remote sensors and controllers and forwards data to internal embedded web server for viewing on any local browser enabled device using standard built-in WIFI services (adhoc or infrastructure).

Expanded access is available by using available internet access points to push data to HelmSmart cloud-base service for global monitoring and event alerts. Connections are established by using local browser configuration pages to link with WIFI Hotspots and cellular wireless modems.

Wireless Mesh Networks have become the standard for home automation due to their simple configuration and robust and reliable performance.



Each node expands to repeat the wireless coverage area and auto-adjust as nodes are added and removed.

SeaSmart Wireless Mesh Network Gateways provide the central browser interface to multiple SeaGauge AGW sensor units and automatically adjust as new hubs and controllers are added. SeaSwitch Keypads and Switch/Dimmer Controllers can also join the mesh network to further expand system capabilities.

Based on the SeaSmart.net line of marine adapters, the SeaSmart Mesh Network Gateway can be purchased with options to support popular network interfaces including NMEA 0183, USB, Ethernet\*, or Wi-Fi\*. NMEA 0183 provides both serial RS232 and USB output to compatible equipment or PC platforms. The wireless options also allow remote access to vessel data over the internet using a separate internet access point, thus enabling a single low-cost solution for remote monitoring anywhere in the world. Cellular interface options provide a complete self-contained cloud-base monitoring and control solution using AT&T or Verizon 4G/LTE networks.



## SeaSmart.Net Series

Model Number	SSMESHGW-01	SSMESHGW-02	SSMESHGW-03
Interface	WiFi 802.11 b/g	Ethernet	Cellular 4G/LTE
<ul> <li>WiFi Mesh Network (802.15.4)</li> <li>Frequency Band ISM 2.4 GHZ</li> <li>Range - 4000 feet</li> <li>Optional remote Antenna</li> </ul>			
<ul> <li>WiFi Local Network (802.11 b/g)</li> <li>Frequency Band 2.4 GHZ</li> <li>Adhoc and Infrastructure modes</li> <li>Optional remote Antenna</li> </ul>			
Ethernet Network (10/100) <ul> <li>DHCP Service compatible</li> <li>Weather-resist cable included – 15 feet</li> <li>Uses off-the-self router/switch</li> </ul>			
<ul> <li>Cellular Network (4G/LTE)</li> <li>Transmit Power up to 23 dbm</li> <li>Bands 1, 2, 3, 4, 5, 8, 12, 13, 17, 19, 20, 25, 26, 28 and 39</li> <li>Accepts AT&amp;T and Verizon Sim cards (4FF Nano)</li> </ul>			
Serial Port (RS232)/USB Port <ul> <li>Supplied weather-resist USB - 2m</li> <li>Twist-Lock connector</li> <li>Supplied PC Instrumentation S/W for live view</li> </ul>			
<ul> <li>Embedded Web Server</li> <li>Included local browser Web Pages for live sensor viewing</li> <li>Switch and Dimmer controls</li> </ul>			
<ul> <li>SD Memory Card Slot</li> <li>Data logging and configuration (up to 16 GB)</li> </ul>			V
Remote Access via Internet *	Gateway*	Gateway*	Built-in
Power Supply	9V-32V DC	9V-32V DC	9V-32V DC
Supply Current	300 mA	300 mA	800 mA
Dimensions * Requires separate Internet Access Point	6"x5"x2"	6"x5"x2"	6"x5"x2"