

## Nautic Alert Vessel Monitoring System (VMS)

Nautic Alert has received Type Approval from NOAA for their **Cellular** and **Satellite NOAA Vessel Monitoring System (VMS) Enhanced Mobile Transceiver Units (EMTU-C)**, which can be used for the new For-Hire recreational charter region in the Southeast.

Nautic Alert (NA) offers two versions of the VMS for specific market applications. Our SKUS for these products: **NA-VMS-FOR-HIRE (cellular)** and **NA-VMS-COMM (satellite)**, **both models are NOAA type-approved**. These models have 25 foot cables; there are also two versions with 50 foot cables, **NA-VMS-FOR-HIRE-50** and **NA-VMS-COMM-50**

- **NA-VMS-FOR-HIRE**, NAUTIC ALERT VESSEL MONITORING SYSTEM, FOR-HIRE RECREATIONAL FISHERIES, used by **For-Hire Recreational Fisheries**

*Per 50 CFR 600.1400 Marine Recreational Fisheries of The United States:*

**For-hire Recreational Fisheries** means “a vessel on which passengers are carried to engage in angling or spear fishing, from whom a consideration is contributed as a condition of such carriage, whether directly or indirectly flowing to the owner, charterer, operator, agent or any other person having an interest in the vessel.”

— aka “**6-Pack**” Charters, Charter Fishing Boat, Head Boat, etc.

- **NA-VMS-COMM**, NAUTIC ALERT VESSEL MONITORING SYSTEM, COMMERCIAL used by **Commercial Fisheries and For-Hire Recreational Fisheries**

*Per 50 CFR 660.702 Marine Recreational Fisheries of The United States:*

- **Commercial Fisheries** means:

(1) Fishing by a person who possesses a commercial fishing license or is required by law to possess such license issued by one of the states or the Federal Government as a prerequisite to taking, retaining, possessing, landing and/or sale of fish; or

(2) Fishing that results in or can be reasonably expected to result in sale, barter, trade or other disposition of fish for other than personal consumption.”

— **in other words, fishing vessels that plan for commercial sale of their catch.**

Both systems are *priced the same*, **\$2,599.00 WHSL and MSRP**, and are stocked here at Gemeco.

NA VMS require use of the **Nautic Alert Reporting Services** and the difference between the two systems are that the NA-VMS-FOR-HIRE cellular system offers a lower monthly cost to the fisherman, at only **\$14.99** per month.

Nautic Alert Reporting Services are described in greater detail on page 4 of this document.

### **NOTE:**

**Wholesale and MSRP pricing are the same – and are eligible for NOAA reimbursement.**

# Nautic Alert Vessel Monitoring System (VMS)



The vessel monitoring system (VMS) is a satellite surveillance system primarily used to monitor the location and movement of commercial fishing vessels within U.S. jurisdiction and treaty areas.

The system uses satellite and cellular based communications from onboard transceiver units, which certain vessels are required to carry. The transceiver units send position reports that include vessel identification, time, date, and location, and are mapped and displayed on the end user's computer screen.

VMS is used to support law enforcement initiatives and to prevent violations of laws and regulations. VMS also helps enforcement personnel focus their time on areas with the highest potential for significant violations.

It is used as evidence in the prosecution of many environmental laws and regulations including regional fishing quotas, the Endangered Species Act, and the Marine Mammal Protection Act.

The VMS program currently monitors more than 4,000 vessels. It is the largest national VMS fleet in the world. The system operates 24 hours a day with near-perfect accuracy.

Vessel monitoring system (VMS) requirements vary according to region.

## **Nautic Alert VMS are NOAA Type approved the following regions:**

- Fisheries of Alaska
- Fisheries of the West Coast of the United States
- Fisheries of the Western and Central Pacific (PI)
- Fisheries of the Pacific Islands
- Southeast Rock Shrimp Fishery
- Atlantic Highly Migratory Species Fishery
- Papahānaumokuākea Marine National Monument
- Inter-American Tropical Tuna Commission Convention Area
- High Seas
- Reef Fish Fishery of the Gulf of Mexico
- ***What's the difference between AIS and VMS?***

The Automatic Identification System (AIS) and Vessel Monitoring System (VMS). AIS uses VHF transmissions and VMS uses satellite or cellular tracking to transmit vessel locations.

We use these complementary vessel tracking systems to track global fishing activity. AIS was designed as a collision avoidance tool and is required for vessels over a certain size by international law and some smaller vessels by national regulation. VMS is a bespoke fisheries management system regulated at the national and regional level. VMS data have traditionally been proprietary, but governments are increasingly sharing these data publicly for greater fisheries transparency.

## Nautic Alert Vessel Monitoring System (VMS)

- **Product description:**

Nautic Alert VMS are kitted assemblies containing the following parts.

The **Commercial System**, NA-VMS-COMM, uses the Nautic Alert Insight X3 **Satellite**, PN: X3-300-1SW, which uses the **Iridium satellite galaxy** to communicate.

**NA-VMS-COMM**, Nautic Alert Vessel Monitoring System, **Commercial Fisheries** contents:

- 1 ea. X3-300-1SW NAUTIC ALERT INSIGHT X3, SATELLITE AND WIFI AUTOSWITCHING
- 1 ea. AT-IRIDIUM-100 OUTDOOR SATELLITE ANTENNA FOR IRIDIUM
- 1 ea. AT-GPS-GLON-100 OUTDOOR 40DB WIDEBAND GPS/ GLONASS ANT
- 2 ea. RF-CABLE-25FT RF CABLE ASSY 25' FOR GPS OR IRIDIUM ANT
- 2 ea. ATNPT-100 3/4 NTP ADAPTER FOR OUTDOOR ANTENNA
- 1 ea. NAIMB-100-1 INSIGHT SURFACE OR WALL BRACKET MOUNT



The **Recreational System**, NA-VMS-FOR-HIRE, uses the Nautic Alert Insight X3 **Cellular/WiFi**, PN: X3-300-1CW, which uses **Cellular services** to communicate.

**NA-VMS-FOR-HIRE**, Nautic Alert Vessel Monitoring System, **For-Hire-Recreational Fisheries** contents:

- 1 ea. X3-300-1CW NAUTIC ALERT INSIGHT X3, DUAL CELL AND WIFI
- 1 ea. AT-GPS-GLON-100 OUTDOOR 40DB WIDEBAND GPS/ GLONASS ANT
- 1 ea. RF-CABLE-25FT RF CABLE ASSY 25' FOR GPS OR IRIDIUM ANT
- 1 ea. ATNPT-100 3/4 NTP ADAPTER FOR OUTDOOR ANTENNA
- 1 ea. NAIMB-100-1 INSIGHT SURFACE OR WALL BRACKET MOUNT



## Nautic Alert Vessel Monitoring System (VMS)

- **Nautic Alert Reporting Services**

NA VMS use the [Nautic Alert Reporting Services](#), which are *billed by and paid directly to Nearshore Networks, a partner of Nautic Alert.*

Reporting Services is a Nautic Alert application used for communicating information messages and for servicing request messages from an authorized remote user. Nautic Alert Reporting Services facilitates the messaging interaction and fulfillment process.

- **Wireless Service Providers**

Because Nautic Alert uses wireless communication technology for Reporting Services, the messages must travel through a wireless service provider. Nautic Alert uses the Verizon Wireless 4G LTE Network or the Iridium Global Satellite Network for message delivery.

Monthly billing and bundled service options available through Nearshore Networks (Monthly Overages Additional)

- **Reporting Service Options**

*VMS 24 Cellular (For-Hire)*

\$14.99 per month, includes hourly location updates. Used by Southeast NOAA regions. Applicable for NA-VMS-FOR-HIRE

*VMS 24 Satellite*

\$39.99 per month, includes hourly location updates. Used by Southeast NOAA regions. Applicable for NA-VMS-COMM

**Insight X3 NOAA Iridium Satellite VMS Plans**

	<b>VMS 24</b>	<b>VMS 48</b>	<b>VMS 96</b>
Carrier	Iridium	Iridium	Iridium
Monthly Cost	\$39.99	\$59.99	\$109.99
Data Allowance	25KB	50KB	100KB
Automatic Position Updates	60 minutes	30 Minutes	15 Minutes
On Demand Data/Messages	150	250	250
Event Reporting	N/A	N/A	N/A
Activation Fee	45	45	45
Data Overage Charges	\$1.35/KB	\$1.35/KB	\$1.35/KB
Global Geofencing	No	No	No

# Nautic Alert Vessel Monitoring System (VMS)

## Wireless Network Trade-Offs

<p><b>Verizon Wireless 4G LTE Network</b></p> <p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Blazing Fast</li> <li>• Best U.S. 4G LTE Coverage</li> <li>• 2-Way On-Demand Communication</li> <li>• Suitable for Coastal Fleet Management</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• No International Coverage</li> <li>• No Coverage in the Ocean</li> <li>• Not Suitable for Ocean Fleet Management</li> <li>• Offers the lowest monthly data costs of \$9.99 per month</li> </ul>	<p><b>Iridium Global Satellite Network</b></p> <p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• International Coverage including Ocean</li> <li>• Maritime Track Record</li> <li>• 2-Way On-Demand Communication</li> <li>• Suitable for Ocean Fleet Management</li> </ul> <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Latency in Message Delivery</li> <li>• Dependency on Antenna Placement</li> <li>• Atmospheric Conditions Could Impact Signal Strength</li> </ul>
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- **VMS Installation**

NOAA states that the “VMS requires professional installation”. That requirement is vague, and it isn’t documented anywhere *what* qualifies “professional installation”.

Until otherwise notified, Gemeco will offer the Nautic Alert VMS to any eligible purchaser that we typically sell to, i.e., Dealers, Installers, Boat Captains, etc.

- **Warranty**

Nautic Alert Insight X2 VMS has a 2-year non-transferable limited warranty from the purchase date.

- **NOAA Vessel Monitoring System Reimbursement Program**

**Nautic Alert VMS complies with NOAA’s reimbursement program.**

The Vessel Monitoring System (VMS) Reimbursement Program was established to offset the cost of purchasing a VMS unit for the purpose of complying with fishery regulations pursuant to the Magnuson – Stevens Act. The reimbursement program was announced by the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service in July 2006 and has expanded nationally since its inception.

*Reimbursement may be available to vessels that install approved VMS units if the VMS is purchased to comply with the new for-hire regulations.*

### Additional Information

Questions regarding the VMS Reimbursement Request Form, VMS Reimbursement Program process, and reimbursement status can be directed to the Pacific States Marine Fisheries Commission by calling 503.595.3100.

Questions regarding regulations, compliance, reimbursement eligibility, type-approvals, and confirmation associated with the Vessel Monitoring System (VMS) Program can be directed to the NOAA OLE VMS Support Center at 1.888.219.9228.

## Nautic Alert Vessel Monitoring System (VMS)

- **NOAA VMS NOTICE**

The Vessel Monitoring System (VMS) is designated as “PROTECTED CRITICAL INFRASTRUCTURE”, meaning information that is not customarily in the public domain.

VMS information is categorized as “FOR OFFICIAL USE ONLY” and “LAW ENFORCEMENT SENSITIVE”, which requires special precautions to ensure the integrity of the data and to protect it from unauthorized access.

Unauthorized use or release of VMS information is subject to criminal and civil penalties under provisions of Titles 5 U.S.C 552 and 18 U.S.C. 1905

- **FAQ**

*Some typical questions from a User trying to decide between the satellite and cellular service devices.*

**The Sat Insight:**

**1) Can we use this to track each boats coordinates in real time?**

Yes, if the boat has connectivity. The satellite unit should always have connectivity. Cellular is subject to coverage, otherwise, the tracks buffer, upload, and can be viewed on the mobile app once the device is back in cellular range.

**2) Can the Captains use this to call out or send emails when out at sea?**

Messaging is limited to NOAA personnel. The device supports commercial forms, however, For-Hire forms must use a 3<sup>rd</sup> party app. Commercial use *must* use the satellite unit, For-Hire recreational *can* use the cellular unit.

**3) Can we bundle 2 boats for a cheaper monthly rate?**

No.

**Cellular Insight;**

**1) Have these devices been approved for use?**

Yes, effective as of 11/08/2021

**2) Can you please send a quote for two units with installation included and a list of everything included in package?**

Gemeco Marine is a distributor only. Installation cost can be quoted by a qualified installer.

Currently, NOAA is considering dropping the requirement for professional installation and allowing DIY. The requirements for what constitute's a “professional” are unknown at this time, as this has been a newly proposed “requirement” but does not seem to be well documented.

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VMS Kit contents:

Commercial VMS (Requires satellite), \$2599

X3-300-1SW

NAIMB-100-1

AT-IRIDIUM-100

AT-GPS-GLON-100

2x RF-CABLE-25FT

2x ATNPT-100

Data plans: <https://nauticalert.com/nautic-alert-platform/reporting-services/#VMS>

For-Hire Recreational (Cellular OK, or can use above package), \$2599

X3-300-1C

NAIMB-100-1

AT-GPS-GLON-100

1x RF-CABLE-25FT

1x ATNPT-100

Data plan: \$14.99/month

**3) Can we bundle 2 boats for a cheaper monthly rate?**

No.

Additionally, can you walk me through the process of the federal program that refunds the money we spend to purchase devices. I can't remember the name of it at this time.

Please refer your inquires to:

[Regional Vessel Monitoring Information, Southeast](#)

For more information about the Southeast Regional Vessel Monitoring System, call the Office of Law Enforcement Southeast Division at **727-824-5344**.

and/or

[NOAA VMS Compliance and Technical Support](#)



Phone: (888) 219-9228

Email: <mailto:mole.helpdesk@noaa.gov>