

# OmniCom™ Vessel Monitoring System

The McMurdo brand OmniCom VMS beacon and PRISMA software offers fishing vessels full regulatory compliance via our tried and tested marine technology. NOAA certified; with twenty years on the water experience; supported by our acclaimed a 24/7 live support centre.

Your fleet is always connected with OmniCom's dual Satellite/Cellular communications technology that automatically switches to the least cost option based on location, with low power consumption, secure communications and utilising Windows applications for a complete, simple to use, end to end VMS solution that tracks your vessels movement for crew safety, fisheries compliance and enforcement.





# Fishing Fleet Monitoring

Monitor and track vessel movement for both preventative and required regulatory compliance and for enforcement purposes



# Safety & Emergency Response

Assist search and rescue teams by connecting to National Emergency Response Services to locate targets in emergency situations



# Protection of Economic Zone

Safeguard Marine Protected Areas and better manage economic zones by identifying and validating foreign vessels in coastal waters

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### Overview

Designed for use with Vessel Monitoring System (VMS) programs, McMurdo OmniCom VMS tracks and monitors vessels using the Iridium satellite and GSM network. The dome positioned on the exterior of the vessel houses the Iridium transceiver, the GNSS receiver, the cellular modem and electronic interfaces. The junction box located in the wheelhouse serves as an interface between the dome and the power supply and offers I/O ports for connecting ancillary devices.

# Benefits

#### End-to-End Vessel Monitoring

OmniCom VMS provides fleets with end to end visibility from ship to shore. Configurable messaging includes position, course, and speed.

#### Ruggedised for Marine Environments

OmniCom VMS is designed for commercial fishermen operating in harsh environments. IP-67 beacon rating and integrated, sealed, and protected components ensure continuous operations during inclement weather.

#### Geofencing for Compliance

OmniCom VMS transmits notifications identifying vessels that approach, enter, leave, or remain within configurable geographical boundaries. This enables fleets and government agencies to enforce compliance for restricted areas.

#### **Operational Efficiency**

Reports are sent in real-time to improve fleet management. Upload latest firmware over-the-air anywhere in the world without taking vessels out of service. Digital I/O, USB, and NMEA 2000 ready ports collect mechanical readings which can be monitored onboard.

#### Lower Costs

Least Cost Routing helps better manage expenses by automatically switching from satellite to cellular coverage when available. System seamlessly changes to satellite when out of cell range so connectivity is never lost. Power consumption is low with 10-36V DC connectivity.

#### Integrated Safety & Security Features

SOS button is easily accessible to alert authorities in emergency situations. Optional AIS connectivity assists in locating vessels and crew such as in Man Overboard events. System can be integrated to ship's SSAS for added security.



### Key Features

- Global coverage (satellite and cellular).
- Marine grade hardware with integrated and sealed antennas.
- Standard message reporting (position, speed, heading, ID number, alerts).
- Back-up rechargeable battery.
- External LED display with indicators for power, connectivity, assistance, messages.
- Alarms for malfunction and intrusions.
- E-mail messaging (send/receive).
- Configurable ports (Digital I/O, USB,NMEA 2000) for readings and transfers.
- Encrypted data for secure transmissions.
- Geofencing (remotely configurable).
- Least Cost Routing with automatic chart course to save on operational expenses.
- Two-way data messaging
- Low power consumption
- SOS button built-in for emergencies.
- Power surge protection (unexpected fluctuations, spikes, & reverse polarity).
- Tamper proof design to protect against theft and unauthorized access.
- Easy component installation.
- 24/7/365 live customer support.
- Bluetooth interface local wireless

# **Dimensions & Weight**

Beacon Size	198 X 192 X 120 mm (L x W x H)
Beacon Weight	2.15 kg (including 7.0 Ah battery)
Junction Box Size	169 x 126 x 48 mm
Junction Box Weight	0.35 kg
Dome Cable	15 m (Dome to Junc- tion Box)
Power Supply Cable	5 m (two wires cable)

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# Specifications

Iridium Type Approved. Transmitter frequency 1616 to 1626.5 MHz, HF Power: 32 dBm max
GSM/GPRS/Edge (850/900/1800/1900 MHz) · UMTS/HSPA (850/900/1700/1900/2100 MHz)
Receiver for GPS & GLONASS, Galileo satellites. Precision of < 10 m
IEC 60945 Approved to guarantee resistance to high temperatures, humidity, salinity, and vibration, and long-term functionality of terminal components
Bluetooth interface for wireless connectivity
Operating Temperature Range: -25°C to +55°C · Storage Temperature Range: -25°C to +70°C
Water & weather resistant. Beacon IP-67, Junction Box IP-65
Power supply range nominal 10V-36V · Current drain: <2A at 12V, <1A at 24V
Extended life up to 72 hours via rechargeable 7.0 Ah battery
Standard memory back up of 90 days
EC declaration of conformity