

# Intellian

## v 6 0 E

### 65CM KU-BAND Maritime VSAT Antenna System



#### FEATURES

##### ADVANCED PERFORMANCE AND DESIGN

Intellian's advanced RF design and technology delivers highly efficient performance, including enhanced tracking precision compared to other 65 cm class systems. The v60E has a compact and streamlined mechanical design to produce a light weight and robust antenna, maintaining high levels of reliability and performance that are compulsory in a Maritime environment.

##### SINGLE CABLE SOLUTION

The v60E includes a single cable, combining Tx, Rx and DC power into one single solution. This allows for a faster and more cost-effective installation, as well as easier troubleshooting and maintenance. The single coaxial cable is connected externally on the base of the radome with no requirement to access the inside of the radome, reducing complexity for the user.

##### SIMPLIFIED INSTALLATION

Through advanced design and understanding of the Maritime user requirements, the v60E delivers a simplified installation process and cost savings. Unlike conventional antenna installations, the v60E does not require the radome or hatch to be opened, as the requirement for shipping brackets has been removed and a direct cable connection port is applied to the outer radome base. The logistics and installation have also been made easier and more cost-effective through the light weight design versus existing 65cm sized antennas that are comparable in the market.

##### ANTENNA MANAGEMENT PLATFORM

Intellian's all-new integrated M&C platform, AptusNX provides a responsive web user interface to manage and control the antenna system. AptusNX provides an intelligent diagnosis function which enables accurate and enhanced antenna performance checks both on-board and remotely. This reduces the need for on-board maintenance and improves performance. The Installation Wizard included in AptusNX automates system configuration so that network operators or service providers can bring the system onto their service faster than ever before.

# v60E 65cm Ku-band Maritime VSAT Antenna System

## TECHNICAL SPECIFICATIONS

### ABOVE DECK UNIT

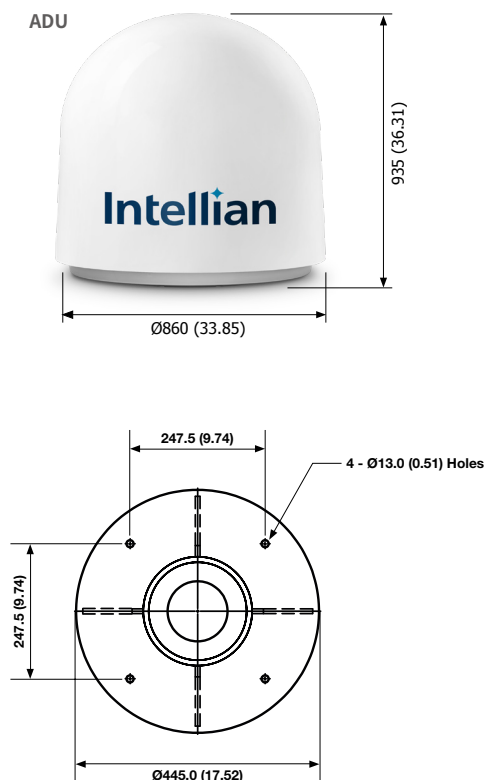
|                        |                                                                               |
|------------------------|-------------------------------------------------------------------------------|
| Radome Height          | 93.5 cm / 36.81"                                                              |
| Radome Diameter        | 86 cm / 33.85"                                                                |
| Reflector Diameter     | 65 cm / 25.6"                                                                 |
| ADU Weight             | 42 kg / 92.6 lbs                                                              |
| Platform               | 3-axis / Azimuth, Elevation, Cross-level                                      |
| Azmuth Range           | Unlimited                                                                     |
| Elevation Range        | -20° to +115°                                                                 |
| Cross-level Range      | Up to $\pm 37^\circ$                                                          |
| Stabilization Accuracy | 0.2° max in presence of specified ship motions                                |
| Tx Frequency           | 13.75 ~ 14.5 GHz Ku-band                                                      |
| Tx Gain                | 37.9 dBi @ 14.25 GHz (excl. radome)                                           |
| Rx Frequency           | 10.7 ~ 12.75 GHz Ku-band                                                      |
| Rx Gain                | 36.5 dBi @ 11.7 GHz (excl. radome)                                            |
| G/T                    | 15.4 dB/K @ 12.75 GHz (Clear Sky, 30° Elevation)                              |
| BUC Power              | 6W                                                                            |
| LNB                    | Universal PLL LNB                                                             |
| Polarization           | Linear, Cross-pol Only                                                        |
| Antenna Cable          | Single 50 ohm coax cable for Rx, Tx, FSK, Reference and Power from ACU to ADU |

### ANTENNA CONTROL UNIT

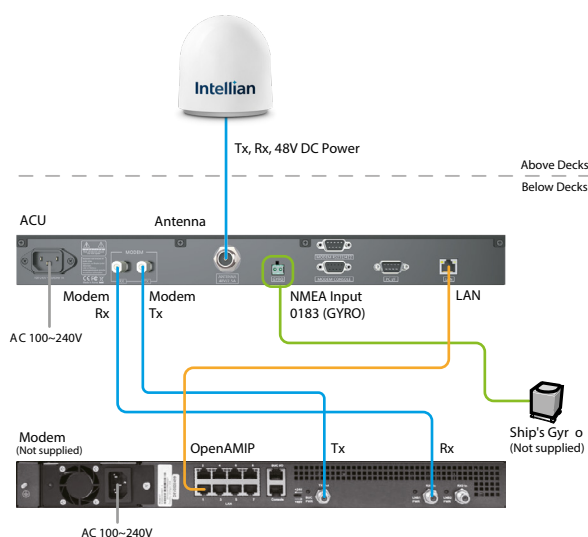
|                       |                                                            |
|-----------------------|------------------------------------------------------------|
| Dimension (WxDxH)     | 43.1 cm x 35.0 cm x 4.4 cm / 17" x 13.8" x 1.7"            |
| Weight                | 5.2 kg / 11.5 lbs                                          |
| LED Indicator         | 6 LEDs for Power, INT/Search, Tracking, Lock, Setup, Error |
| Gyrocompass Interface | NMEA0183                                                   |
| Modem Interface       | Ethernet port / RS-232C, -422C / I/O Console               |
| Remote Management     | Yes                                                        |
| Management Port       | Yes                                                        |
| Intellian LAN Port    | Yes                                                        |
| Power Requirement     | 100~240 V AC, 50~60 Hz, 3A                                 |

## SYSTEM DIMENSION

Unit: mm (inch)



## SYSTEM DIAGRAM



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