

Intellian

v80E

80CM 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 80 cm class systems. The v80E 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 v80E 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 v80E delivers a simplified installation process and cost savings. Unlike conventional antenna installations, the v80E 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.

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.

v80E 80cm Ku-band Maritime VSAT Antenna System

TECHNICAL SPECIFICATIONS

ABOVE DECK UNIT

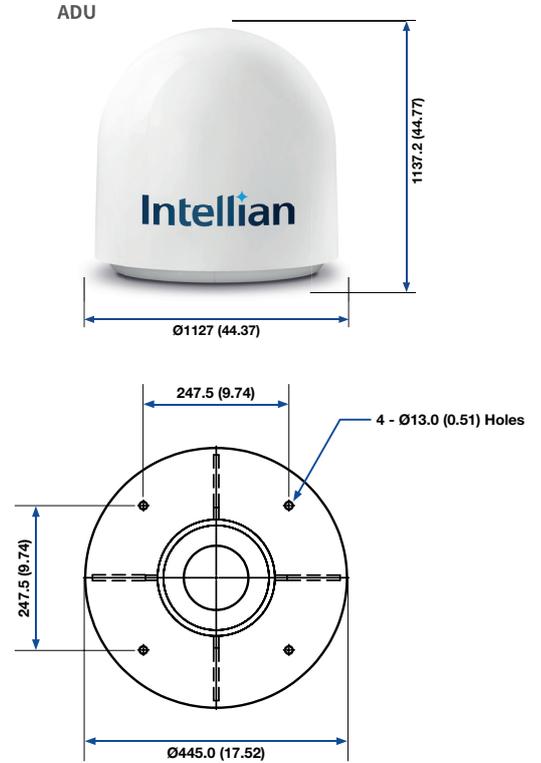
Radome Height	113.7 cm / 44.77"
Radome Diameter	112.7 cm / 44.37"
Empty Dome Weight	24 kg / 52.9 lbs
Reflector Diameter	80 cm / 31.49"
ADU Weight	76 kg / 167.55 lbs
Platform	3-axis / Azimuth, Elevation, Cross-level
Azmuth Range	Unlimited
Elevation Range	-20 to +115°
Cross-level Range	Up to ± 37°
Stabilization Accuracy	0.2° max in presence of specified ship motions
Tx Frequency	13.75 ~ 14.5 GHz Ku-band
Tx Gain	39.8 dBi @ 14.25 GHz (excl. radome)
Rx Frequency	10.7 ~ 12.75 GHz Ku-band
Rx Gain	38.1 dBi@11.7 GHz (excl. radome)
G/T	17.8 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

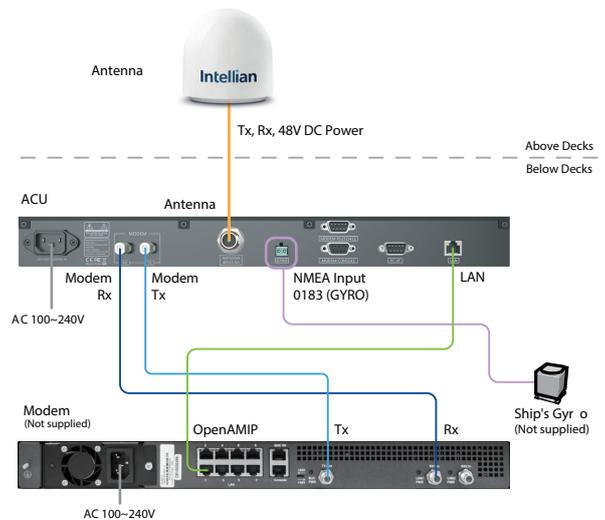
Dimension (WxDxH)	43.1 cm x 35.0 cm x 4.4 cm / 17" x 13.8" x 1.7"
Weight	5.2 kg / 11.5 lbs
LED Indicator	6 LEDs for Power, INT/Search, Tracking, Lock, Setup, Error
Gyrocompass Interface	NMEA0183
Modem Interface	Ethernet port / RS-232C,-422C / I/O Console
Modem Protocol	iDirect, Comtech, SatLink, Hughes, GILAT, Newtec
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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