Intellian

v85NX Ka

85CM Ka-Ku CONVERTIBLE
Maritime VSAT Antenna System

FEATURES

HIGHER RF PERFORMANCE

Intellian's highly efficient RF design delivers superior performance compared to other 80 cm class systems, enabling higher data rates and global operation. The compact 85 cm antenna's smaller footprint allows installation on smaller vessels, yet still allows the system to operate on a 1-meter designed network.

The v85NX Ka delivers improved tracking precision and reliability in a compact and streamlined mechanical design. The system comes standard with a 5W BUC or can be upgraded with 10W BUC variations.

FUTURE PROOF COMMUNICATIONS

The v85NX Ka can be easily converted from Ka to Ku operation by changing the center-mounted RF Assembly and Feed using an available conversion kit. The frequency tuned reflector and radome ensure maximum performance across both Ka- and Ku- bands.

SINGLE COAXIAL CABLE

The v85NX Ka combines Tx, Rx, and DC power in a single cable solution, enabling faster installation and reduced costs. Dynamic Motor Brakes eliminate the requirement of shipping brackets, and the Dome-On external RF cable connection on the base allows faster and easier installation without removing the radome.

EMBEDDED DUAL ANTENNA MEDIATOR

Intellian's new ACU fully supports dual antenna operation without additional complexity and components such as a separate mediator and RF splitters. Streamlined configuration of the dual antenna operation is done via AptusNX.

STANDARDIZED MODULAR COMPONENTS ACROSS NX SERIES

Modular components are used throughout the NX range, such as dynamically braked motors with integrated encoders, and a Main Control Unit. The sharing of common modules across Intellian's NX antenna series reduces the number of spare parts by more than 30%.

APTUSNX INTELLIGENT DIAGNOSTICS

AptusNX, Intellian's all new integrated M&C platform, provides a responsive user interface to manage antenna systems. It also has an intelligent diagnosis function for accurate and enhanced antenna monitoring, and provides detailed reports and measurement for convenient maintenance.

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v85NX Ka 85cm Ka-Ku Convertible Maritime VSAT Antenna System
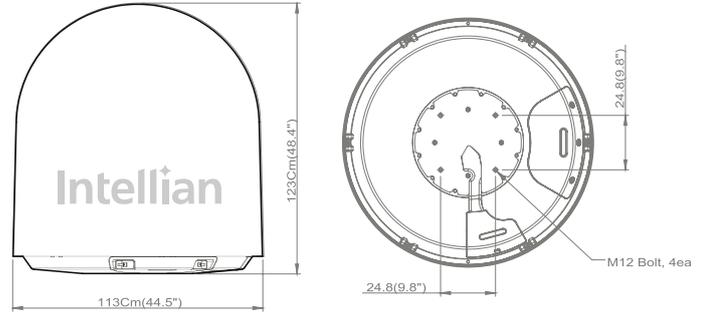
TECHNICAL SPECIFICATIONS

ABOVE DECK UNIT
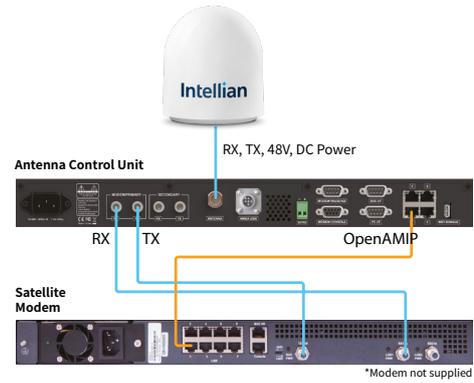
Radome Height	123 cm / 48.4"
Radome Diameter	113cm / 44.5"
Empty Dome Weight	25 kg / 55.1 lbs
Reflector Diameter	85 cm / 33.5"
ADU Weight	95 kg / 211.6 lbs
Platform	3-axis / Azimuth, Elevation, Cross-level
Azimuth Range	Unlimited
Elevation Range	-20° to 115°
Cross-level Range	± 37°
Stabilization Accuracy	0.2° peak miss-pointing @max ship motion condition
Motor Brake System	Dynamic Brake System
Tx Frequency	29.0 ~ 30.0 GHz Ka-band
Tx Gain	45.8 dBi @ Mid band (excl. radome)
Rx Frequency	19.2 ~ 20.2 GHz Ka-band
Rx Gain	42.8 dBi @ Mid band (excl. radome)
G/T	Min. 18.5 dB/K @ 19.7 GHz (clear Sky, 30° Elevation)
BUC Power	5W, 10W (Optional)
Polarization	Circular (RX : LHCP, TX : RHCP)
Antenna Cable	Single 50-ohm Coax Cable for Rx, Tx, FSK, Reference and Power from ACU to CDU

ANTENNA CONTROL UNIT

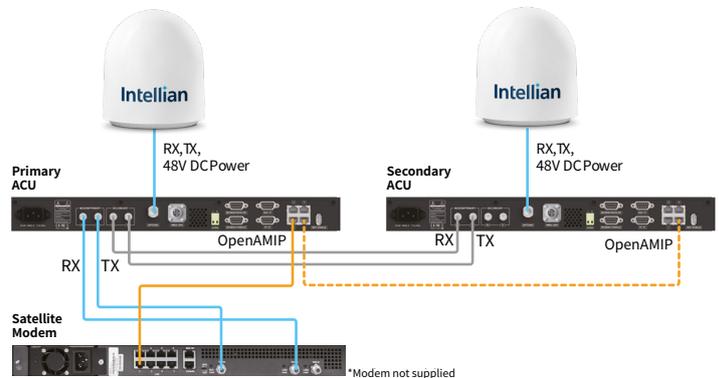|	
Dimensions (WxDxH)	43.1 cm x 35.0 cm x 4.4 cm / 17" x 13.8" x 1.7"
Weight	5.2 kg / 11.5 lbs
Display	256x64 Graphic OLED
Gyrocompass Interface	NMEA 2000, NMEA 0183
Mediator Interface	Yes (Emebeded in ACU, Primary / Secondary control on AptusNX)
Modem Interface	Ethernet port / RS-232C, -422C / I/O Console
Modem Protocol	iDirect, Comtech, SatLink, Hughes, GILAT, Newtec
Remote Management	Yes
Wi-Fi Operation	Yes (w/ Wi-Fi dongle)
Management Port	Yes
Intellian LAN Port	Yes
Power Requirement	100 ~240 VAC, 50~60Hz, 4A

SYSTEM DIMENSION

ADU

SYSTEM DIAGRAM

Antenna Control Unit

RX   TX   OpenAMIP

Satellite Modem

*Modem not supplied

SYSTEM DIAGRAM (DUAL ANTENNA)

Primary ACU   Secondary ACU

RX TX   OpenAMIP   RX TX   OpenAMIP

Satellite Modem

*Modem not supplied

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