# Intellian

# v 1 0 0 N X

## ALL NEW KU-KA DUAL BAND

GEO/MEO/LEO 1m Maritime VSAT Terminal



#### **FEATURES**

### KU-KA DUAL BAND READY

The v100NX is the Ku- to Ka-band convertible antenna that can be simply converted from Ku- to Ka-band. The reflector and radome are frequency tuned for both satellite bands, ensuring maximum performance in both bands

## 2.5 GHZ WIDEBAND KA READY

The v100NX uses 2.5GHz wideband Ka tuned Radome & Reflector. It provides the convenience of not having to replace the Radome and Reflector when using 2.5GHz service in the future.

# STANDARDIZED MODULAR COMPONENTS ACROSS NX SERIES

Modular components are used throughout the NX range, such as dynamic motor brakes with integrated encoders, Main Control Unit and skew assembly. Sharing common modules across Intellian's NX antenna series, the number of spare parts is reduced.

#### GEO/MEO/LEO TRACKING CAPABILITY

The v100NX is ready for the future. Designed with the world's most accurate satellite tracking performance with our proven tracking algorithm covering GEO, MEO and LEO constellations.

## SINGLE COAXIAL CABLE

The v100NX integrates RF and power cables into one coaxial cable. A single cable carries Tx, Rx, DC power, data and reference signals between the antenna and the BOT.

## **NEW APTUSNX**

Intellian's all new integrated M&C platform, AptusNX provides responsive web user interface to manage and control the antenna system regardless of device types. Installation Wizard in AptusNX automates functions for system configuration so that operators are minimally involved in system installation and operation, including automatic cable loss compensation, line-up test and auto diagnostics.





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#### TECHNICAL SPECIFICATIONS

### ABOVE DECK UNIT

Radome Height 145.8 cm / 57.4"

Radome Diameter 137.9 cm / 54.3"

Reflector Diameter 105 cm / 41.3"

Weight 113 kg / 249.1 lbs

Azimuth Range Unlimited

Elevation Range  $-20^{\circ}$  to  $115^{\circ}$  Cross-level Range  $\pm 37^{\circ}$ 

Stabilization Accuracy 0.2° peak miss-pointing @ max ship motion condition

Motor Brake System Dynamic Brake System

Tx Frequency 13.75 ~ 14.5 GHz Ku-band

Tx Gain 42.0 dBi @ 14.25 GHz (excl. radome)

Rx Frequency 10.7 ~ 12.75 GHz Ku-band

Rx Gain 40.7 dBi @ 11.7 GHz (excl. radome)

G/T > 20.0 dB/K @ 12.75 GHz (Clear Sky, 30° Elevation)

BUC Power 8W, 16W, 25W (Optional)

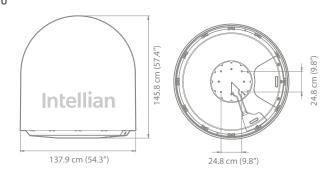
LNB Intellian PLL LNB
Polarization Linear, Cross & Co-pol

Antenna Cable Single 50ohm Coax Cable for Rx, Tx, FSK, Refer-

ence and Power from ACU to ADU

#### SYSTEM DIMENSION

ADU



#### SYSTEM DIAGRAM



## ANTENNA CONTROL UNIT

Dimensions (WxDxH) 43.1cm x 35cm x 4.4cm / 17" x 13.8" x 1.7"

Weight  $5.2 \, \text{kg} \, / \, 11.5 \, \text{lbs}$  Display OLED Display

Gyrocompass Interface NMEA2000, NMEA0183

Mediator Interface Yes

Modem Interface Ethernet port / RS-232C,-422C / I/O Console

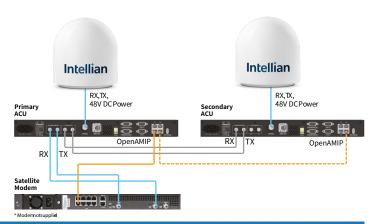
Modem Protocol iDirect, Comtech, SatLink, Hughes, GILAT, Newtec

Wi-Fi Operation Yes (w/ Wi-Fi dongle)

Management Port Yes
Intellian LAN Port Yes

Power Requirement 100 ~240 VAC, 50~60Hz, 4A

## SYSTEM DIAGRAM (DUAL ANTENNA)



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