

# v100NX Ka

### ALL NEW KA-KU DUAL BAND

GEO/MEO/LEO 1m Maritime VSAT Terminal



#### FEATURES

#### FREQUENCY FLEXIBILITY

The v100NX Ka can be easily inter-converted from Ka- to Kuand Ku- to Ka-band operation by changing the center mounted RF Assembly and Feed using an available conversion kit.

## 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%.

#### GEO/MEO/LEO TRACKING CAPABILITY

The v100NX Ka is ready for the future. It is designed with the world's most accurate satellite tracking performance with our proven tracking algorithm that covers GEO, MEO, and LEO constellations.

### SINGLE COAXIAL CABLE

The v100NX 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.

#### **NEW APTUSNX**

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.



## V $100\,N\,X\,K\,a\,$ All New Ka-Ku Dual Band GEO/MEO/LEO 1m Maritime VSAT Terminal

#### TECHNICAL SPECIFICATIONS

#### ABOVE DECK UNIT

Radome Height 145.4 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 29.0 ~30.0 GHz Ka-band

Tx Gain 48.2 dBi @ 29.5GHz (excl. radome)

Rx Frequency 19.2 ~ 20.2 GHz Ka-Band

Rx Gain 44.5 dBi @ 19.7Ghz (excl. radome)

G/T > 20.1 dB/K @ 19.7 GHz (Clear Sky, 30° Eleva-

tion)

BUC Power 5W and 10W

Polarization Circular (RX: LHCP, TX: RHCP)

Antenna Cable Single 50-ohm Coax Cable for Rx, Tx, FSK, Reference and Power from ACU to ADU

### ANTENNA CONTROL UNIT

Dimensions (WxDxH) 43.1cm x 41.1cm x 4.4cm / 17" X 16.1" 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,

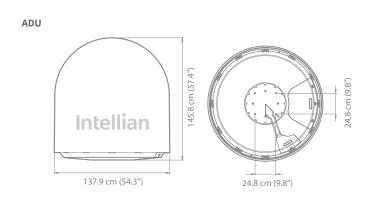
Newtec

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

Management Port Yes
Intellian LAN Port Yes

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

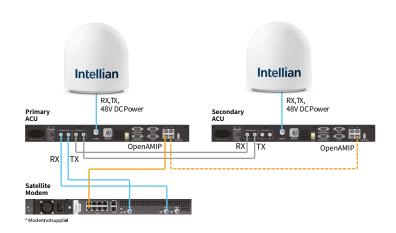
#### SYSTEM DIMENSION



#### SYSTEM DIAGRAM



#### SYSTEM DIAGRAM (DUAL ANTENNA)



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