Intellian

v150NX Ka

1.5M Ka-Ku CONVERTIBLE

Maritime VSAT Terminal



FEATURES

2.5GHZ WIDEBAND KA READY

The v150NX Ka has a full range-optimized reflector and radome supporting high speed Ka-band services, which covers the entire commercial Ka 2.5GHz wide frequency band range. The v150NX Ka supports dual-polarization and can transmit and receive both LHCP and RHCP of Ka-band circular polarization.

NEW APTUS NX

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.

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 Aptus NX.

SINGLE COAXIAL CABLE

The v150NX 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.

KU-KA CONVERTIBLE

The v150NX Ka is the only world's first Ku-Ka 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.



v150NX Ka

TECHNICAL SPECIFICATIONS

ABOVE DECK UNIT

Radome Height 197.0 cm / 77.6" Radome Diameter 190.0 cm / 74.8" Reflector Diameter 150.0 cm / 59.0"

Weight 260 kg

Platform 3-axis / Azimuth, Elevation, Cross-level

Azimuth Range Unlimited Elevation Range -15° to $+110^{\circ}$ Cross-level Range Up to \pm 35°

Stabilization Accuracy 0.2° peak mispointing @ max ship motion

condition

Motor Brake System Dynamic Motor Brake

Tx Frequency 27.5 ~ 30.0 GHz Ka-band

Tx Gain 50.3 dBi @ 29.5 GHz

Rx Frequency 17.7 ~ 20.2 GHz Ka-band

Rx Gain 47.0 dBi @ 19.2GHz

G/T 23.5 dB/K @ 19.2GHz (Clear Sky, 30° Elevation)

and Power from ACU to ADU

BUC Power 25W, 50W, 100W

LNB Intellian Universal Ka-band LNB Polarization Circular (RHCP &LHCP), Dual-Pol Single $50~\Omega$ coax cable for Rx, Tx, FSK

Power Requirement for BUC 100 ~ 240 VAC, 50~60Hz

ANTENNA CONTROL UNIT

Dimensions (WxDxH) 43.1cm x 35.0cm x 4.4cm / 17" X 13.8" X 1.7"

Weight $5.2 \, \text{kg} \, / \, 11.5 \, \text{lbs}$ Display $256 \, \text{x} \, 64 \, \text{Graphic OLED}$

Gyrocompass Interface NMEA2000, NMEA0183

Yes (Embedded 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

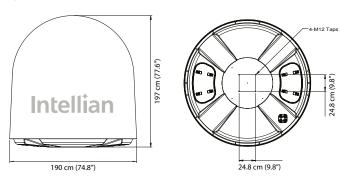
Wi-Fi Operation Yes (w/ Wi-Fi dongle)

Management Port Yes
Intellian LAN Port Yes

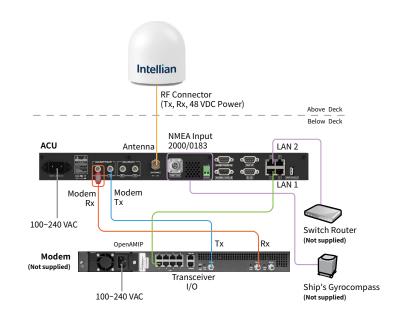
Power Requirement 100~240 V AC, 50~60 Hz, 4A

SYSTEM DIMENSION

ADU



SYSTEM DIAGRAM



Global HQ

Mediator Interface

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