

# v60Ka2XCVR

## **ENHANCED 65CM**

Maritime VSAT Antenna System



#### **FEATURES**

#### COMPACT AND LIGHTWEIGHT

The v60Ka 2 XCVR is a 60 cm compact and lightweight Ka-Band VSAT antenna system. The light weight of the antenna system (86 lbs/39 kg) provides an easy and convenient way to reduce installation time and cost. Despite being the smallest and lightest in Intellian VSAT, the v60Ka 2 XCVR is a top-notch performer even in the harshest sea conditions.

## 2.5GHZ WIDE KA-BAND SUPPORT

The v60Ka 2 XCVR 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. v60Ka 2 XCVR supports dual-polarization and can transmit and receive both LHCP and RHCP of Ka-band circular polarization.

### HIGH POWER UPGRADABLE

The v60Ka 2 XCVR terminal use an integral unit of multiband BUC and LNB arranged in a 4.5W Transceiver. The system with transceiver can use dual polarization for both Tx and Rx with several possible topologies.

The v60Ka 2 XCVR can be easily upgraded with the 9W High Power transceiver. There is no need to replace the ACU and no additional components are required. Simply and easy upgrade 9W transceiver to benefit high throughput service.

#### 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. To enable Dual Antenna operations, only three cables (two RF and one Ethernet) need to be connected between the two antennas. Streamlined configuration of the dual antenna operation is done via AptusNX.

## QUICK & EASY INSTALLATION

The v60Ka 2 XCVR is designed to be easy to install and reduce costs for users. The system includes a single cable design, combining Tx, Rx and DC power into one single solution. 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 customer during installation and maintenance.

## ANTENNA MANAGEMENT PLATFORM

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. AptusNX includes an intelligent installation Wizard to simplify system configuration so that users can become connected faster than ever before. The platform also includes 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.



## v60Ka 2 XCVR

#### TECHNICAL SPECIFICATIONS

#### ABOVE DECK UNIT

Radome Height 93 cm/ 36.6"

Radome Diameter 86.0 cm / 33.9'

Reflector Diameter 65 cm / 25.6"

Weight 39 kg / 86 lbs

Azimuth Range Unlimited

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

Stabilization Accuracy 0.2° peak mispointing @max ship motion condition

Motor Brake System

Tx Frequency

27.5 ~ 30.0 GHz Ka-band

Tx Gain

44.2 dBi @29.0GHz

Rx Frequency

17.7 ~ 20.2 GHz Ka-band

Rx Gain

40.2 dBi @19.0GHz

G/T > 15.5 dB/K @Elevation 10 degree

Transceiver Power 4.5W, 9W Transceiver

Tx Sidelobe Meet FCC 25.218

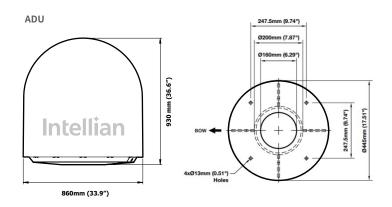
Rx Sidelobe Meet FCC 25.209

Polarization Dual Circular Polarization

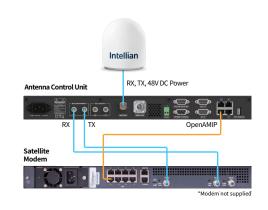
RHCP, LHCP (independent to Rx/Tx)

Antenna Cable Single 50 ohm Coax Cable

#### SYSTEM DIMENSION



#### SYSTEM DIAGRAM



#### ANTENNA CONTROL UNIT

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

Weight 5.2kg/11.5lbs
Display OLED Display

Gyrocompass Interface NMEA 2000, NMEA 0183

Mediator Interface YES

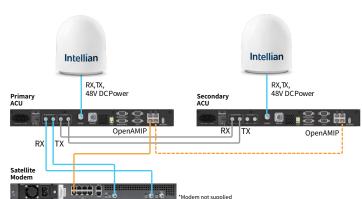
Modem Protocol iDirect, Comtech, SatLink, Hughes, GILAT, Newtec

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

Management Port Yes
Intellian LAN Port Yes

Power Requirement 100 ~240 VAC, 50~60Hz, 3A

## SYSTEM DIAGRAM (DUAL ANTENNA)



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