Intellian® v60

Marine Stabilized Ku-band Communication Antenna System with 3-axis and 60cm Dish Diameter

Intellian® v60 is a Ku-band maritime VSAT antenna system with only 60cm of dish diameter. With its 3-axis stabilization platform, the v60 has superior tracking performance that is nearly equal to the 1 meter grade VSAT antenna system. The v60 is designed and built by Intellian's extremely high vibration, shock, and environmental standards to meet the harshest conditions at sea.

The v60 has an unlimited azimuth range for continuous tracking without unwrapping the cables in the antenna. The wide elevation range from -10 to +100 degrees, enables the v60 to have seamless signal reception while the vessel is traveling near the equator or Polar Regions.

The v60 is the best choice for mariners who are seeking a reliable and high performance broadband system with a compact radome size and an affordable price.

Gyro-free Satellite Search Capability

Intellian's new generation Gyro-free satellite search function enables the v60 to acquire and lock onto the satellite without requiring a separate input from the ship's gyro-compass.

Superior RF Performance

Major RF components are designed and manufactured by Intellian's solid in-house engineering to achieve superior antenna gain and xpol isolation recognized among the best performances in the industry.

Wide Elevation Range

The wide elevation range from -10° to 100° enables the v60 to have seamless signal reception while the vessel is traveling near the Equator or Polar Regions.

Remote Management Solution

The v60 can be accessed, monitored, and controlled from any location in the world. Furthermore, hundreds of routine maintenance activities can be automated. These solutions include operating firmware upgrades, tracking parameters resets, and system diagnosis.

Save Installation and Maintenance Time

Simple design allows users to install and setup the system without the need for a skilled engineer. The v60 provides the utmost in reliability resulting in time and cost savings in maintenance.

Open Platform Compatibility

The v60 is fully integrated with ABS (Automatic Beam Switching) function with leading service providers who use the embedded OpenAMIP protocol of the iDirect platform and v60 is also compatible with various platforms such as Hughes, Comtech, SatLink and more.

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60cm Ku-band 3-axis Marine Satellite Antenna Systems

Technical Specifications

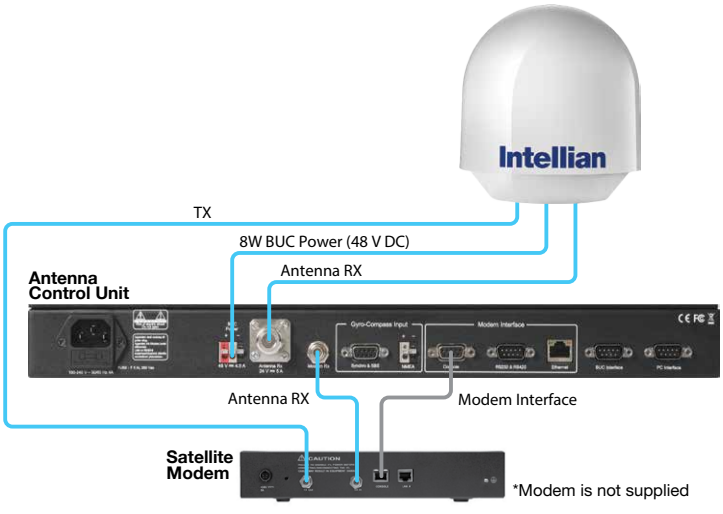
Product Model	Specifications
Intellian v60	3-axis Marine Stabilized Ku-band Communication Antenna System
Radome & Antenna	
Radome (D x H)	78 cm x 84.5 cm / 30.7" x 33.3"
Dish Diameter	60.0 cm / 23.6"
Weight	59.5 kg / 131.2 lbs (variable w/ RF components)
Stabilized Pedestal Assembly	
Pedestal Type	3-axis / Azimuth, Elevation, Cross-level
Azimuth Range	Unlimited
Elevation Range	-10º to 100º
Cross-level Range	±30°
Stabilization Accuracy	0.2° peak mis-pointing @ max ship motion condition
Max Ship's Motion	
Roll / Pitch / Yaw	±25° roll, ±15° pitch, ±8° yaw @ 6 sec period
Turning Rate	Up to 12°/sec & 5°/sec2
Reflector & Feed Assembly	
TX Frequency	13.75 ~ 14.5 GHz Ku-band
TX Gain	38.1 dBi @ Mid band
RX Frequency	10.95 ~ 12.75 GHz Ku-band
RX Gain	35.8 dBi @ Mid band
Polarized Feed	Cross-pol only, or Cross-pol and Co-pol
LNB Pol Control	Automatic LNB-pol angle control

Rack Mount Antenna Control Unit	
Display	2 line 40 character graphic VFD module
Key	20 push keys
Serial Interface	RS-232C (19200 bps 8, N, 1)
Modem Interface	Ethernet port / RS-232C / I/O ports
Remote Access	TCP / IP
Input Power	100~240 V AC, 50~60 Hz (max 350 W including 8 W BUC power)
Gyrocompass Interface	NMEA / Synchro
GPS	NMEA in / NMEA out

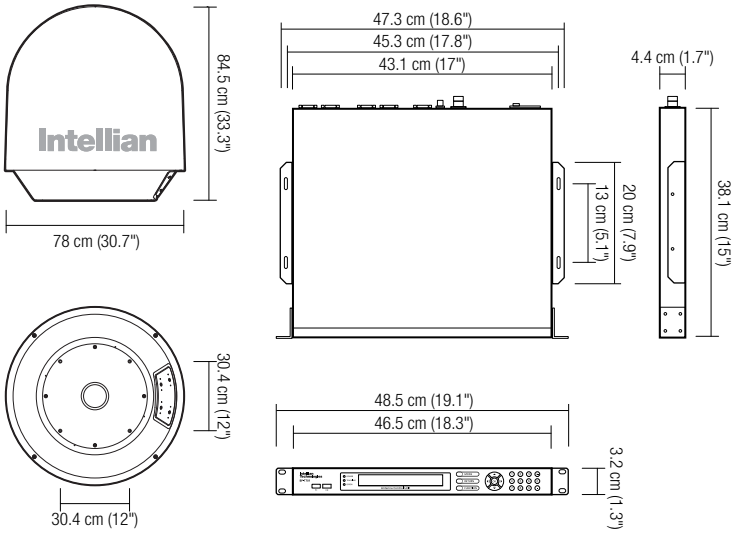
Key Features

Gyro-free Operation	Without requiring heading device input Quick setup to reduce installation time
Remote Access	Built-in web interface, Remote firmware upgrade
Customized Satellite Library	Additional satellite information setting not required for installation
Automatic Diagnosis	Encoder, Motor, Tilt/Gyro sensor, LNB pol control, LNB, Antenna & ACU power, Modem connection, I/F
DC Power Separation	Rotary joint - TX and RX IF signal Slip ring - Antenna power and 8W BUC power

System Diagram



Antenna Dimensions



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