

Intellian® v80G

3-axis Ku-band

Marine Communication VSAT Antenna System



Gyro-Free Satellite Search Capability

Intellian's new generation Gyro-free satellite search function enables the v80G to acquire and lock onto a satellite without requiring a separate input from a ship's gyro-compass. If a heading device is available, it can be connected via an NMEA interface.

Save Installation and Maintenance Time

The simplified design of v80G allows users to install and setup the system without the need for a skilled engineer. Likewise, the v80G's firmware can be updated with an external USB drive, or by Wi-Fi connection.

Remote Management Solution

The v80G can be accessed, monitored, and controlled from any location in the world. Additionally, hundreds of routine maintenance activities can be automated. These functions include operating firmware upgrades, tracking parameters resets, and system diagnosis including the event history logging feature.

Wide Elevation Angle

The v80G's wide-look angle pedestal is designed for extremely low or high latitude areas, such as the Scandinavian Peninsula or the Equatorial regions. Empower your vessel with the ability to travel far and wide, without the worry of signal loss.

Combined BUC Power and TX Signal

The v80G offers a single cable solution that supplies 48V DC power and TX signal together from its control unit via one RF cable. Intellian makes it simpler to install or retrofit.

Modem Formats

The v80G supports a number of open standards enabling satellite network connectivity.

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Technical Specifications

Physical	
Radome Height	120.5cm / 47.5"
Radome Diameter	113.3cm / 44.6"
Antenna Dish Diameter	83cm / 32.7"
Weight	90.3kg / 199 lbs (variable w/ RF components)
Stabilized Pedestal Assembly	
Pedestal Type	3-axis / Azimuth, Elevation, Cross-level
Azimuth Range	Unlimited
Elevation Range	-10° to +110°
Cross-level Range	±30°
Stabilization Accuracy	0.2° peak mis-pointing @ max ship motion condition
Motor Brake System	Elevation, Cross-level
Reflector & Feed Assembly	
TX Frequency	13.75 ~ 14.5 GHz Ku-band
TX Gain	39.6 dBi
RX Frequency	10.95 ~ 12.75 GHz Ku-band
RX Gain	39.3 dBi
G/T	17dB/K (Clear Sky, 30° Elevation)
BUC Power	4W, 8W, 16W (optional)
LNB	Intellian PLL LNB
Polarization	Cross-pol and Co-pol as standard

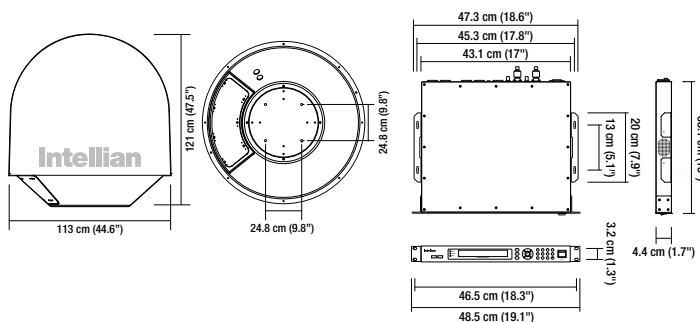
ACU Specification

Antenna Control Unit	
Dimensions (WxDxH)	43.1cm x 38.1cm x 4.4cm / 17" x 15" x 1.7"
Weight	5.2kg / 11.5 lbs
Display	2 line 40 character graphic VFD module
Ship's Gyrocompass Interface	NMEA / NMEA 2000
Modem Interface	Ethernet port / RS-232C / I/O ports
Modem Protocol	iDirect, Comtech, SatLink, Hughes, GILAT
Remote Management	Yes
Wi-Fi Operation	Yes
Power Requirement	100~240V AC, 50~60 Hz, 4A

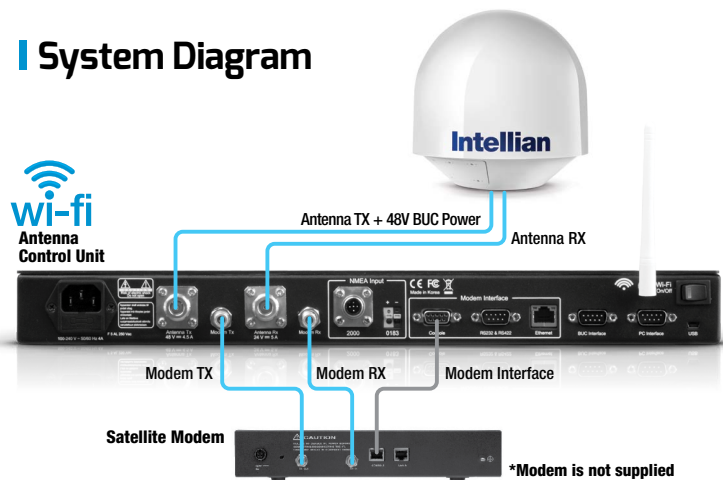
ACU (Antenna Control Unit) Key Features

- Firmware updates can easily and reliably be made through the ACU utilizing Intellian's custom updating software.
- Wi-Fi equipped ACU provides convenient connection to the ACU for setup and system monitoring.
- TCP/IP supports a wide range of modem interface formats (including Ethernet, Console, RS232).

System Dimension



System Diagram



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