

SEALION V101

105cm Maritime 3-axis KU-Band VSAT Antenna

Sealion V101 is a 105cm Ku-Band maritime VSAT antenna system ideal for global commercial vessels, offshore vessels, oil and gas platform, etc. With its 3-axis stabilized platform and 5 patent technologies, Sealion V101 offers superior high tracking performance, supporting remote control by PC and mobile, video monitoring, broadband, video conference, VoIP and other network applications. With the ability to select from a range of satellites, the Sealion V101 is ideal for deep-ocean vessels with high demands for onboard broadband services.



High Tracking Accuracy

Adopting an upper inertial navigation scheme, an accurate error model, and efficient compensation and correction of errors, resulting in high tracking accuracy.

Modem Compatibility

Compatible with a variety of modems, including iDirect, UHP, Newtec, Gilat, Comtech, Hughes, Anovo, Spacebridge and many more.

Open Platform Compatibility

The ACU integrates the ABS function and supports the iDirect OpenAMIP protocol for auto beam switching.

Stable and Reliable Tracking

Adoption of reflector surface tracking algorithm, based on three-dimensional relationships of signal level, azimuth angle, and elevation angle, ensuring stable and reliable tracking.

Easy Installation

Both 1-cable and 3-cable solutions available for connecting the antenna to indoor units, ensuring convenient installation and simplified wiring.

Advanced System Control

The ACU has built-in Wi-Fi, allowing wireless device users to directly connect. Advanced system control and antenna status monitoring can be achieved using an ACU web interface.

Physical Parameters

Radome height	139.4cm (54.9 inch)
Radome diameter	134.6cm (53.0 inch)
Reflector diameter	106cm (41.7 inch)
Radome color	White / Blue
Radome materials	FRP/SMC
Antenna weight	115kg (253lbs)
Environmental humidity	0~95%
Operating temp. range	-25°C~60°C
Waterproofing grade	IP56
Satellite band	KU-Band
Antenna type	Ring focus rear feed antenna
ACU size	350*230*50.98mm (Without bracket)
ACU weight	2.9kg

Tracking Parameters

Stabilization forms	3-axis stabilized: Azimuth, Elevation, Roll
Tracking forms	4-axis tracking: Azimuth, Elevation, Roll, Skew
Tracking and location mode	Built-in inertial guidance+BD/GPS
Azimuth range	Unlimited
Elevation range	-5°~112°
Roll range	±38°
Skew range	±90°
Carrier Tracking speed	Elevation: ±20° @5S
	Roll: ±20° @6S
	Azimuth: ±90° @36S
Initial lock	≤118S
Re-lock after break lock time	Break lock<60s, Re-lock<60s
Tracking braking system	Azimuth, Elevation, Roll, Skew

Communication Parameters

TX frequency	13.75~14.5GHz
TX gain	41.9dBi (14.25GHz)
RX frequency	10.7~12.75GHz
RX gain	40.8dBi (12.5GHz)
G/T (Clear sky 30° elevation)	18.4dB/K
Power input	AC: 100~240V (50Hz)
	DC: 15~36V
Power output	DC: 24V
Static power	33W (Without BUC power)
Dynamic power	44W (Without BUC power)
BUC power	4W/ 6W/ 8W/ 16W (Optional)
Polarization	Linear polarization
Cross-POL isolation	>30dB
Min. EIRP	42dBW

Equipment Size

