OrSat AL-7103 MKII

1.15m (45") Ku-Band
Marine Stabilized Tx/Rx System

Broadband without boundaries

A unique solution for high performance, high-speed 2-way broadband communication, The OrSat system ensures superior quality of connectivity for comprehensive on-board communication and entertainment applications. With an exclusive mechanical design, compact dimensions, no 'keyholes' for continuous zenith-horizon communications and a built-in RF package of 4 or 8W BUC, Orbit's turnkey OrSat (AL-7103 MKII) solution provides 1 Mbps, typically outbound data rate in an unmatched performance to size ratio.

The OrSat is a highly efficient dual offset Gregorian 1.15m (45") Ku-Band antenna housed in a low loss 1.28m (50") radome, delivering the most powerful, compact and cost-effective VSAT package. With a modular yet robust design supporting multiple modem compatibility, the OrSat meets the toughest environmental / military standards, and is the latest innovative addition to Orbit's proven Marine Stabilized Satellite Communication Systems.

OrSat is the first compact maritime system to receive the Eutelsat, Intelsat and Anatel type approvals. This demonstrates the uniqueness of the OrSat system, proving the capabilities, superiority and leadership of Orbit's technology, and further establishes Orbit's commitment to its customers to provide them with cutting edge solutions - by which ensuring best satellite communications.

In addition, the OrSat has been tested and found compliant with environmental conditions such as: EMC: IEC-EN 60945, Safety: EN 60204-1, ISO 12100-2, Shock: STD 810E Method 516.5 Pro.1, Vibration: MIL-STD-167-1 (Mast Mounted).

Backed by over 50 years of global experience and internationally deployed teams of highly trained engineering support personnel, Orbit's solutions are installed on a wide variety of naval & coastguard vessels, private yachts, cargo & cruise ships, tankers, fishing vessels, oil & gas rigs and other maritime craft.

OrSat AL-7103 MKII INTELSAT TYPE APPROVAL GVF/IA 200FLT K2 & G

OrSat AL-7103 MKII EUTELSAT TYPE APPROVAL EA-A033

OrSat AL-7103 MKII ANATEL CERTIFICATE OF HOMOLOGATION 2012-08-4778

Benefits

- Innovative technology
- Plug & Play installation
- Eutelsat & Intelsat approvals
- Worldwide support network
- Easy maintenance - use of modular replaceable LRUs
- Excellent proven track record

Key Features

- Optimal performance at minimum size
- Remote control & monitoring via Ethernet Lan
- Unique 4 axis configuration for full hemispherical coverage
- Built-in NBR (Narrow Band Receiver)
- Interface to IRD modems
- Above & Below Deck connection via a single coax cable using MUX technology
- Built-in satellite database
- Maintenance & data log-in features
- Tested & proven in severe weather conditions

System Specifications

Antenna Type	Dual offset Gregorian
Antenna Size	1.15m (45”)
Radome Size	D: 1.28m (50”) H: 1.61m (63.4”)
Operation Frequency	Tx: 13.75-14.5 GHz Rx: 10.95-12.75 GHz
Antenna Polarity Antenna Gain	Linear H/V Tx: 42.5dBi @14.25 GHz Rx: 41dBi @11.70 GHz
Cross-Pol Discrimination	35dB
System G/T	19dB/K! @ 11.7 GHz 20° elevation

Power Requirements	90-250 VAC 50/60 Hz, 300W
Modem Interface	L-Band
Pointing Accuracy	0.1° RMS
Ship Motion: Roll Pitch Yaw Turning Rate	 30° @ 8 Sec 15° @ 6 Sec 8° @ 15 Sec 12°/Sec
Ship Gyro Interface:	NMEA 0183, Synchro, Step by Step
NBR (Narrow Band Receiver):	Yes
Radio Package:	4W or 8W BUC

OrSat
AL-7103-Ku MK II

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