SANETEL-S120

Ku-band Marine
Satcom-on-the-Move Antenna

Link up the sea empires

High quality ensures excellent performance despite rough sea conditions

SANETEL-S120 Ku-band Marine Satcom-On-The-Move Antenna is a tri-axis stabilized SOTM antenna applied specially for broadband satellite communication for pelagic voyages and vessels in rough sea conditions. SANETEL S120 can achieve automatic search, recognition, locking and real-time tracking of the satellite in stormy environments, even in extreme cases of traversing the equator and typhoon areas. Furthermore, it has a ring focus positive feed dish of 1.2m in diameter. In such a way, SANETEL-S120 enables reliable, continuous broadband Internet access, E-mail, VOIP, VPN, Video Conference, File exchange and other data communications.

SANETEL
www.sanetel.com

BEIJING SANETEL SCIENCE AND TECHNOLOGY DEVELOPMENT CO., LTD.
Add:No.2 Xingye Street, Beijing Economic-Technological Development Area,Beijing, 100176, China
Tel: +86 10 59415188 Fax:+86 10 67816819 E-mail: international@sanetel.com

SANETEL-S120

High quality ensures excellent performance despite rough sea conditions

Ku-band Marine Satcom-on-the-Move Antenna

Advantages

• Large Dish Diameter Antenna

The 1.2m-aperture dish ensures the normal communication for pelagic ships all over the world.

• Tri-Axis Stabilizing

Tri-axis stabilizing gear-driven structure enables its seamless communication while the vessel is traveling near the Equator areas.

• Highly Integrated and Cost-effective Design

SANETEL S120 is highly integrated with built-in Inertial Navigation System and Ku-band BUC up to 50W. The MEMS INS and relevant algorithms make it cost-effective.

• Gyrocompass-Free Tracking Capability

SANETEL S120 utilizes built-in GPS/INS system to provide position and heading reference without separate input from the vessels' gyro-compass.

• Three-level Feedback Tracking Technology

GPS/INS/Satellite Beacon Integrated Tracking Technology guarantees a satisfying satellite acquiring and locking precision even in cases of voyaging in harsh marine environments. This leading edge technology utilizes gyro angular rate, attitude angle, satellite beacon as feedback signals to stabilize the antenna.

• Outstanding Servo Tracking Performance

SANETEL S120 is resistant to rolling and pitching up to 30° of the vessels, with a stabilized precision of 0.15° and tracking angle acceleration of 200°/s^2.

• Resistance to Severe Environments

SANETEL S120 ODU adopts IP67 protection design and is resistant to water and dirt. The built-in dehumidification system effectively protects the product from ocean salt mist.

• Automatic Beam Switching (ABS)

ABS allows seamless connection with almost every satellite routers.

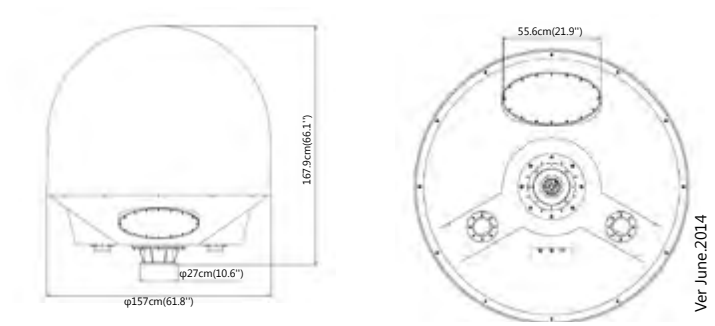
• SANETEL Service

After sales service is available 24x7x365 by hotline, E-mail and on-site engineers.

Specifications

Mechanical	
Stabilized Type	Tri-axis stabilized Gear drive
Dish Diameter	120 cm
Dimension(D x H)	157×168 cm
Antenna Weight	190 kg
Antenna Type	Ring focus
Electrical	
Frequency Range	Rx: 10.95~12.75 GHz
	Tx: 13.75~14.50 GHz
Gain	Rx: 41.6 dBi (12.50 GHz)
	Tx: 42.7 dBi (14.25 GHz)
Side-lobe	≤-15dB
Cross-polarization isolation	≥30dB (within 1dB BW)
G/T	20dB/K@30° elevation
Signal Polarization	Liner Orthogonal
Power Supply	AC 220 V @ 50 Hz
Power Consumption	300W
Tracking Performance	
Initialization Time	≤2 min, cold start
Azimuth Range	360° continuous
Elevation Look Angle Range	-5°~+110°
Antenna Polarization Range	±90°
Vessel Motion Range	±30° yaw,±30° roll,±30° pitch @ 4 sec period
Tracking Rate	Up to 80°/sec and 200°/sec^2
Stabilization Accuracy	0.15°RMS
Environmental	
Operating Temperature	-40°C~+65°C
Storage Temperature	-45°C~+70 °C
Ingress Protection Rating	IP67

Antenna Dimension



Ver June.2014

SANETEL
CONNECTING THE INFINITY

SANETEL, a world-class designer, manufacturer and integrator in mobile satellite communication industry, specializes in three product categories: Satcom-on-the–Move, Mobile Satellite TVRO Antenna and Fly-away Antenna. With the leading technological advantages in Inertial Measurement, Servo Stabilization and Satcom System Integration, SANETEL provides top- performance maritime and land use products and service to both China and overseas Government Organizations and enterprise partners.