# **SANETEL-C80**

# Ku-band Satcom-on-the-Move Antenna for Vehicle



# Present the on-site situation right now in front of you

### Stable and precise satellite tracking despite rugged terrain driving and rapid maneuvering

SANETEL-C80 Ku-band Satcom-on-the-Move Antenna for Vehicle is utilized for land satellite communication applications. SANETEL C80 uses dual-axis stabilized tracking system, and can precisely acquire and lock onto the geosynchronous satellites even during high-speed driving and over rugged terrain. In such a way, SANETEL C80 enables reliable, continuous broadband Internet access, E-mail, VOIP, VPN, Video Conference, File and other data communications in spite of rapid maneuvering.



#### **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 Specifications subject to change without notice. Copyright © 2014 SANETEL. All Rights Reserved.

# SANETEL-C80 Present the on-site situation right now in front of you

Stable and precise satellite tracking despite rugged terrain driving and rapid maneuvering

## Ku-band Satcom-On-The-Move Antenna for Vehicle

## **Advantages**

#### • Lightweight and Stable Structure

Lightweight composite construction and low profile design enable SANETEL C80 to be deployed on a wide variety of both on-road and off-road commercial and governmental vehicles.

#### • Highly Integrated and Cost-effective Design

SANETEL C80 is highly integrated with built-in MEMS Inertial Navigation System and optional with integrated 40W Kuband BUC, meanwhile the external BUC is also supported. The MEMS INS and relevant algorithms make it costeffective.

#### 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.

#### Instantaneous Re-acquisition after Blockage

The satellite acquisition and lock strategy ensures quick initial acquisition and instantaneous re-acquisition time after signal loss.

#### Excellent Compatibility and Expansibility

SANETEL C80 supports TDMA, SCPC or Spread Spectrum and is compatible with a wide range of commercially available modem systems. Wireless control and remote management function are optional.

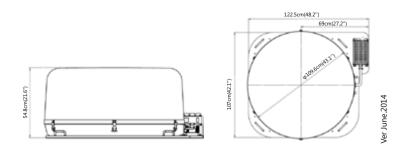
#### SANETEL Service

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

## **Specifications**

Mechanical	
Stabilized Type	Dual-axis stabilized and Gear drive
Equivalent Dish Diameter	80 cm
Dimension(D×H)	110cm×55 cm
Antenna Weight	65 kg
Antenna Type	Ring focus
Electrical	
Frequency Range	Rx: 10.95~12.75 GHz
	Tx: 13.75~14.50 GHz
Gain	Rx: 37.5 dBi (12.50 GHz)
	Tx: 38.5 dBi (14.25 GHz)
The First side-lobe	≤-14dB
Cross-polarization isolation	≥30 dB (within 1 dB BW)
G/T	16dB/K@30° elevation
Signal Polarization	Liner Orthogonal
Power Requirement	AC 220 V @ 50 Hz
Power Consumption	200W
<b>Tracking Performa</b>	nce
Initialization Time	≤2 min, cold start
Azimuth Range	360° continuous
Elevation Look Angle Range	+10°~+90°
Antenna Polarization Range	±90°
Tracking Rate	Up to 80°/sec and 200°/sec <sup>2</sup>
Stabilization Accuracy	0.15°RMS
Satellite re-acquisition	Instantaneous capture for <40 sec blockage < 6 sec for <30 min blockage
GPS/Beidou/INS	Built-in
Environmental	
Operating Temperature	-40°C~+65°C
Storage Temperature	-45°C~+70 °C
Ingress Protection Rating	IP65

### **Antenna Dimension**





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.