

On-the-move Antenna

On-the-move antenna 0.8m, 1.2m, 1.5m and 1.8m is a breakthrough in two-way satellite communication, and it is designed to provide communications for vehicles on-the-move. The innovative antenna system automatically searches for and acquires the designated satellite signal and maintains pointing via automatic tracking and control of the azimuth, elevation and polarization angles while the vehicle is in motion.



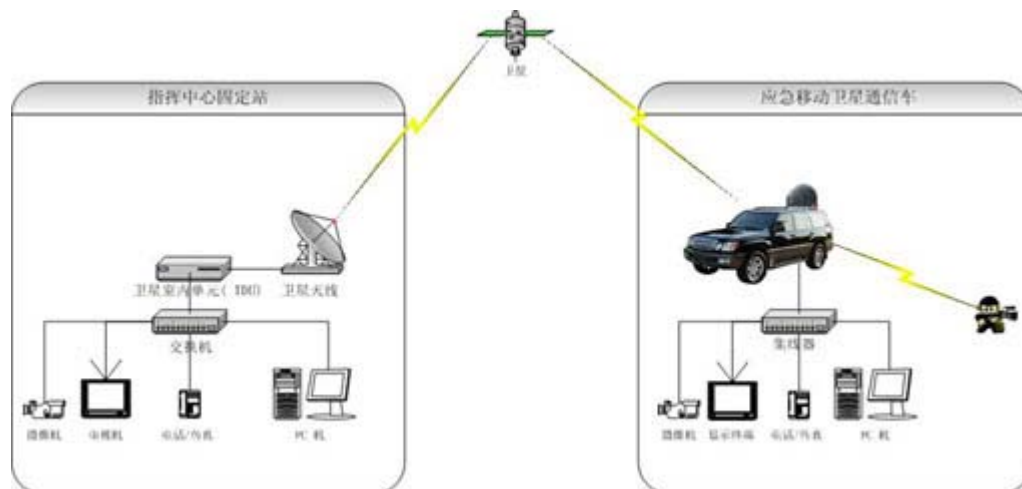
Applications

- ★ Anti-terrorism emergency communication safeguard;
- ★ Military communication and mobile commanding;
- ★ Emergency communication for fire, flood, etc. Disaster;
- ★ Real-time newsgathering;
- ★ Live programme for match;
- ★ Telecommunications for unmanned aerial vehicle, helicopter, Early Warning Aircraft

Key Features

- ★ 0.8m, 1.2m, 1.5m and 1.8m Ring-focus Antenna;
- ★ Carbon fiber reflector, Light weight and high intensity;
- ★ Robust design for vehicle mounting;
- ★ Automatically acquire and track the Satellite, no manual pointing is required;
- ★ Vehicle speed can reach to 140Km/h;
- ★ The time for acquiring Satellite is less than 1second;
- ★ High performance mono-pulse tracking and control system;

System Structure Diagram





Specification

Antenna Tracking System:

- ★ Antenna Type: 0.8m, 1.2m, 1.5m, 1.8m Ring-focus antenna
- ★ Operation frequency: ku-band
- ★ Antenna tracking range: Az: No limit; El: 20~90°
- ★ Highest speed of turntable: 100° / s
- ★ Highest rotating speed of tracking: 60° / s
- ★ Static Point accuracy: 0.1°
- ★ Dynamic tracking accuracy: 0.2°
- ★ Initial acquisition time: ≤180s

Communication performance:

- ★ Operation frequency : ku band
 - Rx: 14.0GHz—14.5 GHz
 - Tx: 12.256GHz—12.75GHz
- ★ Rate: 2—10Mbps
- ★ Operation type: voice/data/video, etc.

Power supply:

- ★ Vehicle-based generator or commercial power
- ★ AC: 220V±5%, 50Hz±3Hz

Environmental:

- ★ Operational temperature: -20~+70°C
- ★ Storage temperature -40~+80°C
- ★ Temperature 0~100%
- ★ Altitude≤5000m
- ★ The Max vehicle speed for keeping normal communication:
 - ★ First-class road ≤120Km/h
 - ★ Second-class road ≤70Km/h
 - ★ Third-class road ≤30Km/h

Others:

- ★ The time for continuous using ≥24h
- ★ Life ≥15 years