

1.2m KU Band Flyaway Antenna



Side View



Front View

Structure:

This flyaway antenna primarily serves the Military market and has been adapted as a mature product in use for more than 5 years to meet the needs of the commercial sector as well. The main reflector consists of six (6) aluminum sectors, with a quick and easy joining mechanism that enables the user (Military or Civilian) to construct the

dish without using tools. The light and sturdy feed support rod allows fine tuning the elevation and azimuth positions prior to locking them in place.

The tripod base support is flexible but offers firm support. Overall antenna structure is well balanced, reasonably efficient and all parts can be conveniently disassembled and packed in the cases. This antenna characteristics offer good F/D value, compact design, light weight (two cases each weighing under 31 Kgs,) reliable performance, easy pointing and acquisition of the desired satellite, in normal conditions less than 3 minutes, making the system highly suitable as a portable satellite communication station.

Technical specifications :

1. Electrical

Frequencies: Ku Band

* Transmit : 14.0 GHz~14.5GHz

* Receive : 12.25 GHz~12.75GHz

Gains : Tx : $\geq 42.8 + 20\log(F/14.25)$ dBi

Rx : $\geq 41.5 + 20\log(F/12.25)$ dBi

VSWR : ≤ 1.25 (Tx , Rx)

Polarization : Linear

Cross Polarization Isolation: > 30 dB (on axis)

Tx-Rx Isolation : > 85 dB(resistant filter)

Sidelobe properties:

First sidelobe : ≤ -14 dB

Side-lobes : $29 - 25\log\theta$ dBi($1^\circ \sim 48^\circ$)

-10 dBi ($48^\circ \sim 180^\circ$)

2. Mechanical specifications :

Antenna Aperture : 1.2 M

Antenna Type : Single Off-Set Feed

Case size: 825mm×485mm×220mm

Weight : ≤ 40 kg (net antenna weight)

Set up time : 10 Minutes for 2 persons

Operation : Manual adjustment

Rotation range : 360°

Elevation movement : 10°~ 70°

Polarization adjustment range: ±90°

3.Environmental specifications :

Operation wind speed : 8m/s

Operation temperature : -40℃~+55℃

Relative Humidity : 0%~100%

Rain fall : 100mm/h

Closing ice : 25mm

Sunlight radiation : 1.1kW/m²

* can be extended per customer requirement.