

FLYAWAY ANTENNA 1.2 METERS ASL 1.2 MPA Ka, Ku, X and C Band

Carbon Fiber Manual Antenna



Product features:

- High strength, light weight, carbon fiber *reflector with a surface accuracy of $<v0.3\text{mm RMS}$.
- Easy assembly and operation, without training or tools.
- Azimuth & elevation angle adjustment realizes fast and fine tuning functions, it rapidly decreases the satellite acquisition period.
- Supports C, X, Ku and Ka-band operation.
- Supports various requirements such as, Broadcast & Media, Emergency & Public Safety, Oil & Gas, etc.

Antenna System Specification

RF Feature		
Reflector Aperture	1.2m	
Reflector Material	Carbon Fiber	
Reflector Type	Offset	
Tx Frequency(GHz)	13.75~14.5	29.4~31
Rx Frequency(GHz)	10.75~12.75	19.6~21.2
Tx Gain(dBi)	$\geq 42.6 + 20 \lg(f/14.25)$	$\geq 49.3 + 20 \lg(f/30)$
Rx Gain(dBi)	$\geq 41.8 + 20 \lg(f/12.25)$	$\geq 45.5 + 20 \lg(f/20)$
Tx VSWR	$\leq 1.3 : 1$	
Rx VSWR	$\leq 1.3 : 1$	
Tx Isolation	$> 85\text{dB}$	
Rx Isolation	$> 40\text{dB}$	
Side Lobe	first side lobe $< -14 \text{ dB}$ $29 - 25 \log \theta$ ($1^\circ \leq \theta < 20^\circ$) $32 - 25 \log \theta$ ($20^\circ \leq \theta < 48^\circ$) -10 dB ($\theta \geq 48^\circ$)	
Power Capacity	200	
Polarization Feature	Linear	Circular
Feed Interface	WR-75	Tx WR28 Rx WR42
Cross Polarization	$\geq 35 \text{ dB}$ (Axis) $\geq 30\text{dB}$ (-1dB beam width)	≥ 27 (Axial)
Mechanical Feature		
Case Size	Case: 820mm * 550mm * 510mm , Weight: 34Kg	
Slewing area	Azimuth	360°
	Elevation	$10^\circ \sim 90^\circ$
	Polarization	$\pm 95^\circ$
Operational Wind	36km/h (10mps) Random 65km/h (20mps) With anchored unit	
Temperature	$-40^\circ \text{ C to } +55^\circ \text{ C}$	
Humidity	100%	