

1.0M KA/KU Band Manual Flyaway Antenna



General specification:

Probecom Manual flyaway antenna with a select range of 0.75m, 1.0m, and 1.2m series. Antenna adopts with splash plate form, which improves antenna reflection efficiency and achieve antenna better sidelobe in EHF band. Antenna reflector material use carbon fiber material with specially designed processing and surface treatment technology, which improve reflector surface accuracy (RMS with 0.2mm) and compressive strength, meet with Ka band conductivity. Compact design make antenna with light weight, easy portable and ease operate.

Highlight Features:

- Carbon fiber antenna reflector with light weight, high precision and high efficiency, corrosion resistance and other characteristics, it ensured the antenna in the normal operation under harsh environment in greatest degree.
- Compact structure, Lightweight, portable, rapid deployment, high performance, a person can install and point to satellite within 5 minutes, available in airline baggage.
- Quick feed swap and simplified polarization selection
- The latest design of the EHF-band satellite antenna, being compact and robust, cost-effective can be used in the fast and reliable satellite communications.
- Designed specifically for field use, regardless of when and where, it can quickly transfer high-quality broadband content.

Applications:

- Sudden public events and all kinds of disasters on-site information gathering Disaster relief.
- Public security, military, government, oil, water conservancy, electricity, finance and other important sectors of the country
- The remote areas and the vast rural areas out of coverage .Field operations, exploration, military police and news media.

Components:

- Ring-Focus Sputtering Plate Antenna
- Azimuth & elevation turntable
- Portable case
- Compass& leveling

Technical Specification

Electrical Specification				
Type	Ka-Band		Ku-Band	
Operating Frequency (GHz)	RX	TX	RX	TX
	19.2-21.2	29.0-31.0	10.7-12.75	13.75-14.5
Gain, mid-band (dBi)	43.9@20.2GHz	47.3@30.0GHz	39.6@12.0GHz	40.9@14.0GHz
Polarization	RHCP/LHCP		Linear V/H Adjustable	
Axis Ratio	1.5dB	1.2dB	/	
VSWR	1.3:1	1.3:1	1.4:1	1.3:1
-3 dB Beam Width, Mid-band	1.0°	0.70°	1.71°	1.47°
Tx to RX isolation	85dB		80dB	
Cross-polarization isolation	/		35dB	
Sidelobe	CCIR 580-5		CCIR 580-5	
Tx. Power Capability	/	100W	/	100W
Feed Interface	WR42	WR28	WR75	WR75
Feed Insertion Loss	0.5dB	0.4dB	0.4dB	0.3dB

Mechanical Specifications	
Antenna Type	Splashing Plate
Main Reflector	Carbon Fiber
Feed	Quick feed swap
Weight	≤17Kg (Ka band) ≤18Kg (Ku band)
Operating Wind	Stable wind≤50km/h; gusting≤65km/h (need increase weight)
Operating Temperature	-40°C~+60°C
Drive Mode	Manual
Azimuth Travel	360°
Elevation Travel	0°~90°
Surface Accuracy (R.M.S)	0.2mm
Relative Humidity	0%~100%