

SA-0.9TFly **0.9M Flyaway Antenna**

I. General

This portable antenna with the simple structure, the pleasing outward appearance, it is convenient to set up, store up and move, mainly use in the flexible situations of public security, news collecting, geology exploration. It consists of the reflector, the feed system and support pole, pedestal, electronic and mechanical compass, accessories and cabinet. The reflector is composed of aluminum one piece panel , convenient to put into package to stow. The reflector is made by light weight aluminum material to reduce weight of the antenna. The antenna adopts a small antenna pedestal to realize the independent azimuth and elevation rotation as well as the reliability. Antenna can be placed in box and backpack separately. The external dimension of the box is 1100mm×1100mm×300mm, The total weight of box and antenna is approx. 20Kg. The electronic compass installed on the azimuth turn-plate displays and align the antenna azimuth. Then put the mechanical compass on the reference panel of the antenna back panel, adjust elevation to align the satellite. The duration of satellite alignment is ≤3 minute.

II. Main Specifications

2.1 Electronic performance

No.	Electronic performance	Ku-Rx.	Ku-Tx.
1	Operation frequency (GHz)	12.25~12.75	14.0~14.5
2	Gain (dBi)	≥39.5+20log(F/12.5)	≥40.7+20log(F/14.25)
3	VSWR	≤1.25: 1	≤1.25: 1
4	Polarization	Linear polarization	
5	Cross polarization isolation	≥30dB (antenna axial direction)	
6	Rx.-Tx. isolation	≥85dB (including rejection filter)	
7	Side-lobe feature	≤-14dB (first side lobe); 29-25log ⁰ dBi(1° ~48°) -10dBi(48° ~180°)	

2.2 Mechanic performance

No.	Mechanic performance	Parameters
1	Rotation	Azimuth: ±30° (trimmer) , Elevation: 15° ~ 50°
2	Polarization travel range	±90°

2.3 Environmental characteristics

No.	Environmental characteristics	Parameters
1	Operation wind speed	8m/s
2	Operation temperature	-40℃~+55℃
3	Relative humidity	0%~100%
4	Rain fall	100mm/h
5	Closing ice	25mm
6	Sunlight radiation	1.1kW/m ²

III. Photos of Portable 0.9 M Antenna





