

### One Button Acquisition Manpack Antenna



#### Product features:

- \* High strength, light weight, carbon fiber reflector with a surface accuracy of <math><0.3\text{mm}</math> RMS.
- \* Azimuth & elevation angle adjustment realizes fast and fine tuning functions, it rapidly decreases the satellite acquisition period.
- \* “One button acquisition” realizes non-professional personnel can easily follow the instruction to finish satellite acquisition.
- \* The auto acquisition device includes a dual axis positioner, a GPS receiver and a digital compass
- \* Non professional personnel can easily follow the instruction to finish satellite acquisition;
- \* No additional tools required to realize satellite acquisition.

# Earth Station Antenna

**ASL 1.8 MPA Ku-Band & ASL 1.2 MPA X-Band  
1.8 Meter Man-pack Satellite Antenna**

## Antenna System Specification

RF Feature				
Reflector Aperture	1.8m			
Reflector Material	Carbon Fiber			
Reflector Type	Offset			
Tx Frequency(GHz)	13.75~14.5	7.9~8.4	5.85~6.725	5.85~6.425
Rx Frequency(GHz)	10.95~12.75	7.25~7.75	3.40~4.20	3.625~4.20
Tx Gain(dBi)	46.3+20 lg(f/14.25)	41.5+20 lg(f/8.2)	39.3+20 lg(f/6.25)	38.7
Rx Gain(dBi)	45.3+20 lg(f/12.5)	40.8+20 lg(f/7.5)	35.4+20 lg(f/3.8)	35.4
Tx Isolation	>85dB	>85dB	>85dB	
Rx Isolation	>35dB	>35dB	>35dB	
Polarization Feature	Linear	Circular	Linear	Circular
G/T (dB/K)	24.4 (20° EL)	18.8 (10° EL. 50k LNA)		
Feed Interface	WR75	WR112	Tx WR137 Rx WR229	Tx WR137 Rx WR229
Cross Polarization	≥35 dB (Axis)		≥32dB (-1dB)	
Side Lobe	first side lobe < -14 dB 29-25logθ (1° ≤θ <20°) 32-25logθ (20° ≤θ <48°) -10 dB (θ ≥48°)			
Mechanical Feature				
Case Contents	Rotary Table	Side:820*500*620mm		Weight: 75Kg
	Support Arm	Side:1200*450*200mm		Weight: 38Kg
	Reflector	Side:1300*600*670mm		Weight: 74Kg
	Support Leg	Side:1100*350*320mm		Weight: 48Kg
Slewing area	Azimuth	± 180°		
	Elevation	10°~90°		
	Polarization	± 95°		± 95°
Operational Wind	Operation: 70kmph Survival: 100kmph			
Pointing Loss	Maximum 2.0 dB peak Rx loss at Ku (Operational Wind)			
Power Supply	DC 24 V , AC110-220V (Optional)			
Temperature	-40° C to +60° C			
Humidity	0-100%			