

Earth Station Antenna

**ASL1.8MPA Ku-Band & ASL1.8MPA X-Band
1.8-Meter Manpack Satellite Antenna**

Antenna Features

- High strength, lightweight, carbon fiber reflector with a surface accuracy of <math><0.3\text{mm}</math> RMS.
- Easy assembly and operation.
- Azimuth and elevation angle adjustments providing fast and fine tuning functions.
- C, INSAT, X, Ku and Ka-Band operation.
- Supports various requirements such as Broadcast & Media, Emergency & Public Safety, Oil and Gas, etc.

Carbon Fiber Manual Manpack Antenna





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Antenna System Specifications

Typical RF Features				
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+20lg(f/14.25)	41.5+20lg(f/8.2)	39.3+20lg(f/6.25)	38.7
Rx Gain (dBi)	45.3+20lg(f/12.5)	40.8+20lg(f/7.5)	35.4+20lg(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 NA)		
Feed Interface	WR75	WR112	Tx WR137	Tx WR137
			Rx WR229	Rx WR229
Side Lobe Performance	first side lobe < - 14 dB			
	29-25logθ (1°≤θ<20°)			
	32-35logθ (20°≤θ<48°)			
	-10 dB (θ≥48°)			
Cross Polarization	≥35 dB (Axis)		≥30dB(-1dB)	
Mechanical Features				
Case Contents	Rotary Table	Side:1260*550*650mm		Weight: 60Kg
	Support Leg	Side:1570*580*420mm		Weight: 58Kg
Slewing Area	Azimuth	± 180°		
	Elevation	10° ~ 90°		
	Polarization	± 95°		
Operational Wind	30 km/h (8mps) Random 72km/h (20mps) with anchored unit			
Temperature	-40°C to +60°C			
Pointing Loss	Maximum 2.0dB peak Rx loss at Ku			
Humidity	98%			

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