

4.5 Meter Prime Focus Antenna System

L-Band,X-Band (Military/WGS) Option

Description

Type: DH 4.5 Meter PF C/ Ku-band Antenna

4.5 Meter Prime Focus Antenna System delivers exceptional performance for receive only applications for L, X and Ku-band frequencies. This antenna offers a reflector that incorporates precision-formed panels and contoured radials that ensure ease of installation. The pedestals are designed for full orbital arc coverage and are readily adaptable to ground or rooftop installations.

Key Features

- High-Accuracy, Aluminum Draw Die Formed Reflector Panels.
- C/Ku Dual band feed systems, MultiBeam Satellite dish solutions,
- Galvanized steel parts/ Hot Dipped Galvanized
- 130km/h gusts to 200km/h High Operation Wind Option.
- Installation Without a Crane.



RF & Antenna Specifications		
C/Ku-band Linear	Receive	Receive
Frequency, GHz	3.625-4.2	10.95-12.75
Mid-Band Gain, dBi	43.2	53.59
VSWR	1.4:1	1.3:1
3dBBeam Width, deg	1.14	0.36
Noise Temperature		
20 Deg Elevation, K	43	48
30 Deg Elevation, K	40	43
Typical G/T @ 10 Degrees	25.5	32.1
Port to Port Isolation		
Rx to Rx (same band),dB	30	30
Axial ratio,dB	1.5	
Cross-pol on Axis, dB	30	30
Insertion Loss, dB	0.35	0.25
Feed Interface	WR-229 CPR	WR-75 CPR
Radiation Pattern Compliance	FCC 25.209, ITU-RS.580-6,	
First sidelobe, dB	≤ -14	
Sidelobe Envelope	32 - 25 log (1° ≤ θ < 20°)	

Mechanical Specifications

Antenna Optics	Prime focus design
Reflector Aperture	4.5 Meters (14.7Feet)
Reflector Panels	12 precision-formed aluminum panels
F/D Ratio	0.4
Mount Configuration	Turning Head Pedestal Elevation-over Azimuth axis configuration
Drive Type	Manual / Motorized jack screw
Surface Accuracy (RMS)	0.5 mm
Elevation Travel	0° to 90 ° Continuous, Including El Angle Adjustment Mark,
Azimuth Travel	± 85° or 360°Continuous,
Pol. Travel	± 90°Continuous,
Antenna Foundation	Reinforced Concrete Foundation, or Non-penetrating mount (NPM)
Shipping Case	3 Case, Seaworthy Packing
Shipping Weight	839KG, Total volume: 5.14CBM
Environmental Performance	
Operational Wind	45 mph (72 km/h) gusting to 60 mph (97 km/h)
Survival Wind	125 mph (200 km/h),
Temperature	-40° C to +50° C
Humidity	0-98%