

3.7 Meter Prime Focus Antenna System

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

Description

Type: DH 3.7 Meter PF C/ Ku-band Antenna

3.7 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 | 41.1 | 51.69 |
| VSWR | 1.4:1 | 1.3:1 |
| 3dBBeam Width, deg | 1.45 | 0.44 |
| Noise Temperature | | |
| 20 Deg Elevation, K | 36 | 37 |
| 30 Deg Elevation, K | 33 | 34 |
| Typical G/T @ 10 Degrees | 22 | 29 |
| 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 | | |
| First sidelobe, dB | FCC 25.209, ITU-RS.580-6, ≤ -14 | |
| Sidelobe Envelope | 32 - 25 log (1° $\leq \theta < 20^\circ$) | |

| Mechanical Specifications | |
|---------------------------|--|
| Antenna Optics | Prime focus design |
| Reflector Aperture | 3.7 Meters (12Feet) |
| Reflector Panels | 12 precision-formed aluminum panels |
| F/D Ratio | 0.365 |
| 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 | $\pm 85^\circ$ or 360°Continuous, |
| Pol. Travel | $\pm 90^\circ$ Continuous, |
| Antenna Foundation | Reinforced Concrete Foundation, or Non-penetrating mount (NPM) |
| Shipping Case | 3 Case, Seaworthy Packing |
| Shipping Weight | 600KG, Total volume: 4.11CBM |
| 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% |