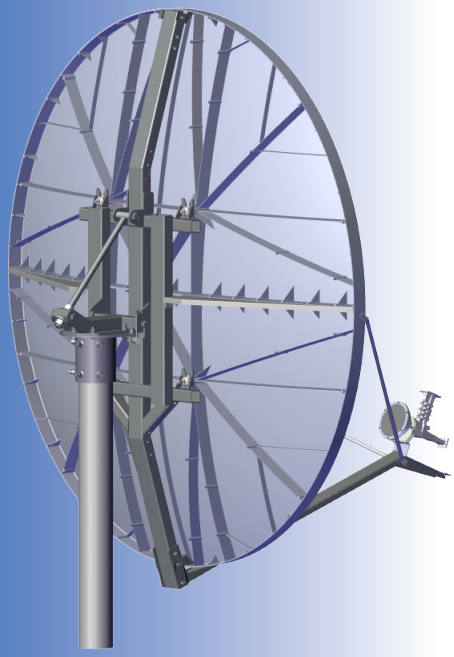
2.4m RxTx Class IIIH Antenna System



Type 243H / 244 Antenna Product Specification

- ISO 9001:2008 Certificate Of Registration

ROHS compliant

RF Performance

MODEL#	24416 C Band	243H36 Ku Band
Effective Aperture	2.4m (96in)	2.4m (96in)
Operating Frequency Tx	5.850-6.425 GHz	13.75-14.50 GHz
Rx	3.625-4.200 GHz	10.70-12.75 GHz
Polarization	Circular or Linear	Linear, Orthogonal
Gain (±0.2 dB) Tx	42.2 dBi @ 6.1 GHz	48.9 dBi @14.3 GHz
Rx	38.2 dBi @ 3.9 GHz	47.4 dBi @12.0 GHz
3dB Beamwidth Tx	1.3°@6.1 GHz	0.59°@14.3 GHz
Rx	2.1°@3.9 GHz	0.71°@12.0 GHz
Sidelobe Envelope (Tx, Co-Pol dB)		
Mainbeam < Θ < 20°		9 - 25 Log Θ dB
20° < Θ 26.3°		-3.5 dB
26.3° < Θ < 48°		32-25 Log Θ dB
48° < Θ < 180°		-10 dB
Antenna Cross-Polarization	30 dB on Axis	30 dB on Axis
Antenna Noise Temperature		
10° El	45° K	55° K
20° El	40° K	46° K
30° El	35° K	45° K
VSWR Tx	1.3:1	1.3:1
Rx	1.5:1	1.5:1
Isolation (Port to Port) Tx	80 dB	80 dB
Rx	70 dB	35 dB
Feed Interface Tx	Type N or CPR-137	WR75 Flat Flange
Rx	CPR-229	WR75 Flat Flange

Mechanical Performance

Reflector Material	Glass Fiber Reinforced Polyester
Antenna Optics	Two-Piece Offset Feed Prime Focus
Mount Type	Elevation over Azimuth
Maximum Radio Weight	11 kg or 25 lbs for RF Electronics
Elevation Adjustment Range	10° - 90° Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous, ±12° Fine
Mast Pipe Size	6” Sch 80 Pipe (6.62” O.D.)(16.8cm)
Wind Loading. Operational	105 km/h (65 mph)
Survival	241 km/h (150 mph)
Temperature	-50°C to 60°C
Humidity	0 to 100% (Condensing)
Atmosphere	Standard Hardware Meets 500 Hour Salt Spray Test Requirements (ASTM B-117)
Solar Radiation	360 BTU/h/ft2
Shock and Vibration	As Encountered During Shipping and Handling

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