

3.7M C-Band Rx/Tx Antenna

Series 1374

Technical Specifications

Electrical		Linear	Circular
Antenna Size		3.7 M (144 in.)	3.7 M (144 in.)
Operating Frequency (GHz)	Receive	3.625 - 4.20 GHz	3.625 - 4.20 GHz
	Transmit	5.85 - 6.425 GHz	5.85 - 6.425 GHz
Midband Gain (+ .2dB)	Receive	40.40 dBi	40.20 dBi
	Transmit	44.00 dBi	44.00 dBi
VSWR		1.3:1 Maximum	1.3:1 Maximum
Pattern Beamwidth (in degrees at midband)			
-3 dB		Rx 1.4° Tx 1.0°	Rx 1.4° Tx 1.0°
-15 dB		Rx 3.2° Tx 2.2°	Rx 3.2° Tx 2.2°
Antenna Noise Temperature			
5° Elevation		55 K	58 K
10° Elevation		47 K	50 K
20° Elevation		42 K	45 K
40° Elevation		40 K	43 K
Power Handling		500 Watts	500 Watts
Cross Polarization Isolation			
On Axis		> 30 dB	> 17.7 dB
Within 1.0 dB Beamwidth		> 25 dB	> 17.7 dB
Output Waveguide Interface Flange		Rx WR229 Tx Type N or WR137	Rx WR229 Tx Type N or WR137

Mechanical

Reflector Material	Glass Fiber Reinforced Polyester SMC	
Antenna Optics	8 Pc. Prime Focus, Axisymmetric, f/D = 0.375	
Mast Pipe Size	6" SCH 80 Pipe (6.62" OD) 16.83 cm.	
Elevation Adjustment Range	10° to 70° Continuous Fine Adjustment (90° Optional)	
Azimuth Adjustment Range	360° Continuous	
Shipping Specifications		
Approximate Net Weight	660 lbs. (300 kg.)	
Approximate Packaged Weight	735 lbs. (334 kg.) 77" x 80" x 29"	

Environmental Performance

Wind Loading	Operational	45 MPH (72 km/h)
	Survival	125 mph (201 km/h)
Temperature	Operational	-40° to 140° F (-40° to 60° C)
Rain	Operational	1/2"/Hour
Atmospheric Conditions	Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas	
Relative Humidity	0 to 100% Condensing	
Solar Radiation	360 BTU/h/ft ²	

GENERAL DYNAMICS

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