

Series 2383 High Wind

3.8M Receive/Transmit High Wind Antenna

Technical Specifications

Electrical

		C-Band Linear	C-Circular	Ku-Band
Antenna Size		3.8M	3.8M	3.8M
Operating Frequency (GHz)	RX	3.625 - 4.2 GHz	3.625 - 4.2 GHz	10.95 - 12.75 GHz
	TX	5.845 - 6.725 GHz	5.845 - 6.425 GHz	13.75 - 14.5 GHz
Midband Gain (\pm .2dB)	RX	41.8 dB	42.1 dB	51.7 dB
	TX	46.2 dB	46.0 dB	53.2 dB
Antenna Noise Temperature				
10° elevation		31 K	28 K	29 K
20° elevation		25 K	22 K	21 K
30° elevation		23 K	20 K	20 K
40° elevation		22 K	19 K	19 K
Sidelobe Envelope, Co-Pol (dBi)				
$1^\circ \leq \theta \leq 20^\circ$		29-25 Log θ dBi	29-25 Log θ dBi	29-25 Log θ dBi
$20^\circ < \theta \leq 26.3^\circ$		-3.5 dBi	-3.5 dBi	-3.5 dBi
$26.3^\circ < \theta \leq 48^\circ$		32 -25 Log θ dBi	32 -25 Log θ dBi	32 -25 Log θ dBi
$48^\circ < \theta <$		-10 dBi (averaged)	-10 dBi (averaged)	-10 dBi (averaged)
Polarization		Linear	Circular	Linear
Feed Interface	RX	CPR 229	CPR 229	WR75 or direct radio
	TX	CPR 137 or Type N	CPR 137 or Type N	mounting
Axial Ratio	RX/TX		1.3 / 1.3 VAR (2.28 dB)	
	RX/TX (Optional)		1.3 / 1.09 VAR (.75 dB)	
Cross-Pol Isolation		>30 dB (on axis)	>30 dB (on axis)	>30 dB (on axis)
VSWR		1.3:1 Max.	1.3:1 Max.	1.3:1 Max.

Mechanical

Reflector Material		Glass Fiber Reinforced Polyester SMC
Antenna Optics		4 Piece Prime Focus, Offset Feed
Mast Pipe Size		10" SCH 80 Pipe (10.75" OD) 27.30 cm.
Elevation Adjustment Range		12° to 90° (0° to 15° Inverted)
Azimuth Adjustment Range		360° Continuous, \pm 35° Fine Adjustment
Shipping Specifications	Weight	2100 lbs. (955 kg.)

Environmental Performance

Wind Loading	Operational	65 MPH (104 Km/H) with 0.5 dB loss @ 14.25 GHz 75 MPH (120 Km/H) with 0.5 dB loss @ 6.14 GHz 75 MPH (120 Km/H) with 1.0 dB loss @ 14.25 GHz
	Survival	150 MPH (240 Km/H)
Temperature	Operational	-40° to 140° F (-40° to 60° C)
	Survival	-50° to 160° F (-46° to 71° C)
Atmospheric Conditions		Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation		360 BTU/h/ft ²