

### Technical Specifications

Antenna Size		1.2 M (47 in.)
Operating Frequency (GHz)	Receive	10.95 - 12.75 GHz
	Transmit	13.75 - 14.5 GHz
Midband Gain ( $\pm$ .2dB)	Receive	41.7 dBi
	Transmit	43.2 dBi
Antenna Noise Temperature		
20° elevation		46 K
30° elevation		43 K
Sidelobe Envelope, Co-Pol (dBi)		
$1^\circ \leq \theta \leq 20^\circ$		29-25 Log $\theta$ dBi
$20^\circ < \theta \leq 26.3^\circ$		- 3.5 dBi
$26.3^\circ < \theta \leq 48^\circ$		32 -25 Log $\theta$ dBi
$48^\circ < \theta$		-10 dBi (averaged)
Cross-Polarization	Within BPE	-30 dB Max.
	Any Angle off Axis	-25 dB Max.
VSWR		1.3:1 Max.
Feed Interface	Receive	WR75
	Transmit	WR75
ODU	Tier 1	6 lbs.
	Tier 2	12 lbs.
Reflector Material		Glass Fiber Reinforced Polyester SMC
Antenna Optics		Prime Focus, Offset Feed
Mast Pipe Size		2.5" SCH 40 Pipe (2.88" OD)
Elevation Adjustment Range		5° to 90° Continuous Fine Adjustment
Azimuth Adjustment Range		+ 20° Fine, 360° Continuous
Mount Type		Elevation over Azimuth
Shipping Specifications		90 lbs. (41 kg.)
Wind Loading	Operational	50 mph (80 km/h)
	Survival	125 mph (201 km/h)
Temperature	Operational	-40° to 140° F (-40° to 60° C)
	Survival	-50° to 160° F (-46° to 71° C)
Rain	Operational	1/2" /hr
	Survival	2" /hr
Ice	Operational	-----
	Survival	1/2" radial
Atmospheric Conditions		Salt, Pollutants and Contaminants as Encountered in Coastal and Industrial Areas
Solar Radiation		360 BTU/h/ft <sup>2</sup>