

# 0.84M Elliptical Ku-Band Receive Only

## Series 1840

### Technical Specifications

Electrical	Series 1840 Ku-Band
Antenna Size	84 CM (33 in.)
Reflector Dimensions	40.00" x 30.00" Ellipse
Operating Frequency (GHz)	10.95 - 12.75 GHz
Midband Gain ( +/- .5dB)	38.4 dBi
First Sidelobe (Typical)	-23 dB
Antenna Noise Temperature 20° Elevation 30° Elevation	43 K 41 K
Sidelobe Envelope, Co-Pol (dBi) 100λ / D ≤ θ ≤ 20° 20° < θ ≤ 26.3° 26.3° < θ ≤ 48° θ > 48°	29 - 25 Logθ dBi -3.5 dBi 32 - 25 Logθ dBi -10 dBi (averaged)
Cross-Polarization	>30 dB on Axis
VSWR	1.3:1 Max.
Feed Interface	Rectangular WR 75

Mechanical	
Reflector Material	One Piece Glass Fiber Reinforced Polyester SMC
Antenna Optics	Prime Focus, Offset Feed Elliptical
Mount Type	Elevation over Azimuth
Mast Pipe Size	2" SCH 40 Pipe (2.38" OD) 6.05 cm
Elevation Adjustment Range	5° to 85°, Continuous Fine Adjustment
Azimuth Adjustment Range	360° Continuous
Shipping Specifications	27 lbs. (12 kg.)    34 x 10 x 40

Environmental Performance		
Wind Loading	Operational Survival	50 mph (72 km/h) 125 mph (201 km/h)
Temperature	Operational Survival	-40° to 140° F (-40° to 60° C) -50° to 160° F (-46° to 71° C)
Rain	Operational Survival	1/2"/hr 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/ft2

## GENERAL DYNAMICS

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