Electrical Specifications

Operating Frequency Band			
C-Band Receive	3.4-4.2 GHz		
C-Band Transmit	5.850-6.725 GHz		

9.3m Series, with 2-port linear combiner

Rx Frequency	Rx Gain	Tx Frequency	Tx Gain
3.400 GHz	49.2	5.850 GHz	53.5
3.625 GHz	49.6	6.175 GHz	53.9
4.000 GHz	50.4	6.425 GHz	54.1
4.200 GHz	50.8	6.725 GHz	54.6

9.3m Series, with 4-port circular combiner

Rx Frequency	Rx Gain	Tx Frequency	Tx Gain
3.625 GHz	50.0	5.850 GHz	53.1
4.000 GHz	50.9	6.175 GHz	53.5
4.200 GHz	51.3	6.425 GHz	53.8

Polarization
Linearly- or Circularly-Polarized

Polarization Discrimination (Linearly-Polarized)
>35 dB across 1 dB beamwidth — 19 - 25 log ø from 1.8° to 9.2°

Voltage Axial Ratio, C-Band, circularly-polarized with 4-port combiner <1.06:1 across the 1 dB beamwidth <1.09 and 1.2 with 2-port

Beamwidth, Mid-band, Degrees	C-Band
3 dB Receive (Transmit)	0.51 (0.34)
15 dB Receive (Transmit)	1.00 (0.65)

Antenna Noise Temperature – under clear sky conditions, at 68°F (20°C), with 2-port combiner..

Elevation	Kelvin
10°	39
30°	29
50°	27

Antenna VSWR, Transmit and Receive <1.3:1

G/T Performance

LNA/LNB Noise Temperature	65K	45K	30K
ES93 G/T at 10° EL (dB/K)	30.0	30.9	31.8

Based on a 4-port, linearly-polarized antenna configuration at 4 GHz.

Uplink EIRP Capability

HPA Output (watts)	125	500	3000
Uplink EIRP (dBW)	74.8	79.8	88.6

Based on a 2-port antenna configuration at 6.175 GHz and 0 dB allowance for waveguide (IFL) loss between the HPA and the antenna.

Mechanical Specifications

Feed Type	Dual-Reflector, Gregorian
Reflector Material	Precision-Formed Aluminum
Reflector Segments	20
Mount Type	El over Az, Tripod
Antenna Pointing Range, Coarse/(Continuous)	
Elevation	0-90° (90°)
Azimuth	180° (120°)
Polarization	180° (180°)
Hub/Enclosure Dimensions	
Diameter	84 in (2.31 m)
Depth	46 in (1.17 m)
Wind Loading, Survival	
125 mph (200 km/h) in any position of operation	
Wind Loading, Operational	
45 mph (72 km/h), gusting to 65 mph (105 km/h) (motor drives)	
Temperature, Operational	-40° to 125°F (-40° to 52°C)
Rain	4 in (102 mm) per hour
Solar Radiation	360 BTU/hr/ft^2 (1135 watts/m^2)
Relative Humidity	100%
Shock and Vibration	As encountered by commercial air, rail and truck shipment
Atmospheric Conditions	Moderate coastal/industrial areas. Severe conditions require additional protection.

Slab Foundation Information

Soil Bearing Capacity	2000 lb/ft^2 (9770 kg/m^2)
Reinforcing Steel	2946 lb (1339 kg)
Concrete Compressive Strength	3000 lb/in^2 (211 kg/cm^2)
Foundation Size:	
Length	19.5 ft (5.94 m)
Width	19.5 ft (5.94 m)
Depth	2.5 ft (0.76 m)
Concrete Volume	35.2 yd^3 (27 m^3)

Note: Other typical foundation designs are available.

Typical Shipping Information

Net Weight	8000 lb (3629 kg)
Gross Shipping Weight	11,154 lb (5059 kg)
Shipping Volume	1280 ft^3 (36.3 m^3)
Shipping Container	Standard 40 ft land/sea container

All designs, specifications and availabilities of products and services presented are subject to change without notice.