

Ø 11.0 M Low Orbit Earth Station Antenna

Model No. HGA - 11FL



Option

- Operational Band
 - covering a full frequency of X, L, S-Band, and for other frequency ranges
- Two-port or four-port TX/RX, linear or circular polarized feed
- Full reflector and feed deicing system with manual or automatic controls
- Motorized azimuth, elevation and polarization drive system with controls and readouts
- Servo system
- Available for the sizes from 5.5m to 13m

Electrical Specifications

Model	HGA-11S68/L57	
Parameters	Specification	
Antenna diameter	11 M	
Frequency	1.435 ~ 1.85GHz(L-Band), 2.2 ~ 2.4GHz(S-Band)	
	L-Band	S-Band
Gain	39.34 dBi	43.90 dBi
G/T	18.74 dB/ ° K	23.3 dB/ ° K
Beamwidth	1.26 °	0.82 °
1st Sidelobe	19 dB	
Wind		
– Operational	96 km/h	
– Stowed	193 km/h	
Weight, max (without base riser)	7770 kg	
Power requirement	55 kVA	

* All values are at rear feed flange.

* Typical G/T at 20° elevation with dry clear weather 18°C temperature and clear horizon by using single LNA.

* All specifications are typical at mid-band frequency.

Environmental Specifications

Operational Winds	32 m/sec
Survival Winds (Stow position)	60 m/sec
Ambient temperature (Survival)	-29°C ~ 60°C
Rain (Operational and Survival)	Up to 100 mm/h
Relative Humidity (Operational and Survival)	0% ~ 100% With Condensation
Solar Radiation	1000 kcal/h/m ²
Radial Ice (Survival)	2.5 cm on all surfaces or 1.3 cm on all surfaces with 130 km/h wind gusts

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Mechanical Specifications

Azimuth Travel	±360° Continuous
Azimuth Travel Rate	15° / sec (Max.)
Elevation Travel	-5° to 185°
Elevation Travel Rate	15°/ sec (Max.)
Tilt Travel	10° to 350°
Tilt Travel Rate	1°/ sec (Max.)
Reflector	Aluminum
Surface Accuracy	0.5mm (RMS)
Pedestal Structure	Steel
Finishes	
Reflector Surface	Aluminum panels with heat-diffusing white paint
Pedesta	Hot-dip galvanized
Surface Accuracy	0.5mm (RMS)
Foundation Size	11M × 11M × 0.7M
Concrete Volume	84.7m ³
Soil Bearing Pressure	10.000kg/m ²

Antenna Drawing

