

Diameter 1.8 M V-SAT Antenna

Model No. HG18X



Options

- Ka Band Antenna System
- Deicing Systems (Heating or Blower)
- LNA or LNB and BUC System Integration
- Turnkey Installation and Testing
- Packing for Sea and Air Transport

Electrical Specifications

Model	HG18KaL1		HG18KaL2		HG18KaC1		HG18KaC2	
Polarization	Ka-Band Linear Pol.		Ka-Band Linear Pol.		Ka-Band Circular Pol.		Ka-Band Circular Pol.	
Ports	Rx Port	Tx Port	Rx Port	Tx Port	Rx Port	Tx Port	Rx Port	Tx Port
Frequency (GHz)	18.2~ 19.2	27.0 ~ 31.0	18.7~21.2	27.0~31.0	18.3~ 21.2	29.2~ 31.0	18.7~ 21.2	27.0~ 31.0
Gain (Mid; dBi)	48.8	52.6	49.4	52.6	49.3	52.9	49.7	53
Typical G/T	(1.6 dB LNB)		(1.6 dB LNB)		(1.6 dB LNB)		(1.6 dB LNB)	
10°(EL)	25.02 dB/K		25.21 dB/K		25.19 dB/K		25.18 dB/K	
20° (EL)	25.54 dB/K		25.87 dB/K		25.82 dB/K		25.93 dB/K	
30° (EL)	25.74 dB/K		26.14 dB/K		26.08 dB/K		26.25 dB/K	
40° (EL)	25.84 dB/K		26.28 dB/K		26.21 dB/K		26.42 dB/K	
Beam Width (3 dB)	0.61°	0.39°	0.57°	0.39°	0.58°	0.38°	0.55°	0.37°
VSWR	1.5	1.3	1.5	1.3	1.3	1.3	1.3	1.3
Antenna Noise Temperature								
10°(EL)	95.17 K	•	118.75 K	•	114.1 K	•	139.56 K	•
20°(EL)	68.21 K	•	81.95 K	•	79.18 K	•	94.73 K	•
30°(EL)	58.76 K	•	68.54 K	•	66.59 K	•	77.89 K	•
40°(EL)	54.09 K	•	61.9 K	•	60.31 K	•	69.36 K	•
Axial Ratio	N/A		N/A		1.5dB		1.5dB	
Cross Polarization Isolation	30 dB	35 dB	30 dB	35 dB	18 dB	21.2 dB	18 dB	21.2 dB
Side lobe Performance	ITU-RS-580		ITU-RS-580		ITU-RS-580		ITU-RS-580	
Feed Interface	WR42	WR28	WR42	WR28	WR42	WR28	WR42	WR28
Max Power	100 W		100 W		100 W		100 W	
RF Specification	HG18KaL1618B69		HG18KaL2618B69		HG18KaC1618B69		HG18KaC2618B69	

※ All values are at weather temperature of 20°C, clear sky, no wind load, and dry humidity of 50% at the feed flange.

G/T will be changed according to LNB input VSWR.

Diameter 1.8 M V-SAT Antenna

Mechanical Specifications

Antenna Diameter	1.8 M
Antenna Type	Prime Focus and Offset Feed
Reflector	Glass Fiber Reinforced Polyester SMC or Aluminum
Mount Type	Elevation Over Azimuth
Mast Pipe Size (Inch)	4.0"
Azimuth Adjustment Range	0 to 360° continuous
Elevation Adjustment Range	5 to 90° continuous
Shipping Weight	113.3 Kg

Environmental Specifications

Survival Wind Loading	200 km/h
Operational Wind Loading	72 km/h
Operational Temperature	-40° to + 60° C
Survival Temperature	-50° to + 70° C
Rain	up to 50 mm/h
Solar Radiation	1 kw/m ²
Ice (Survival)	1/2" radial
Shock and Vibration	As encountered during shipment by airplane, ship or truck
Atmospheric Conditions	As encountered in coastal regions and/or heavily industrialized areas

※ Without active elements and components.

Antenna Drawing (unit : mm)

