

# Diameter 2.4 M V-SAT Antenna

**Model No.** HG24X



**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	HG24KaL1		HG24KaL2		HG24KaC1		HG24KaC2	
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)	51.3	55.1	51.9	55.1	51.8	55.4	52.2	55.5
Typical G/T	(1.6 dB LNB)		(1.6 dB LNB)		(1.6 dB LNB)		(1.6 dB LNB)	
10°(EL)	27.52 dB/K		27.71 dB/K		27.69 dB/K		27.68 dB/K	
20° (EL)	28.04 dB/K		28.04 dB/K		28.32 dB/K		28.43 dB/K	
30° (EL)	28.24 dB/K		28.24 dB/K		28.58 dB/K		28.75 dB/K	
40° (EL)	28.34 dB/K		28.34 dB/K		28.71 dB/K		28.92 dB/K	
Beam Width (3 dB)	0.46°	0.29°	0.43°	0.29°	0.43°	0.28°	0.41°	0.28°
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	HG24KaL1618B69		HG24KaL2618B69		HG24KaC1618B69		HG24KaC2618B69	

※ 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 2.4 M V-SAT Antenna

## Mechanical Specifications

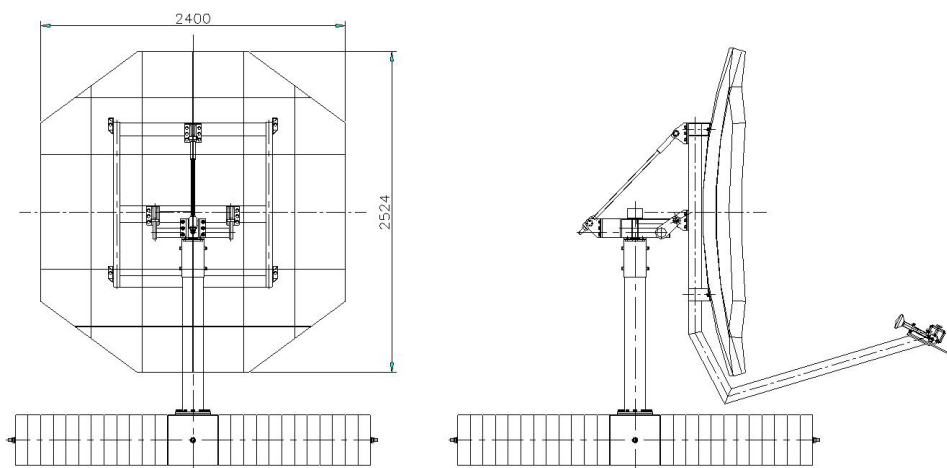
Antenna Diameter	2.4 M
Antenna Type	Prime Focus and Offset Feed
Reflector	Glass Fiber Reinforced Polyester SMC or Aluminum
Mount Type	Elevation Over Azimuth
Mast Pipe Size (Inch)	4.0"
Azimuth Adjustment Range	0 to 360° continuous
Elevation Adjustment Range	5 to 90° continuous
Shipping Weight	131.5 Kg

## 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	1kw/m <sup>2</sup>
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)



Rear View

Side View