

Diameter 1.2 M V-SAT Antenna

Model No. HG12X



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 | HG12KaL1 | | HG12KaL2 | | HG12KaC1 | | HG12KaC2 | |
|------------------------------|---------------------|-------------|---------------------|-----------|-----------------------|------------|-----------------------|------------|
| 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) | 45.3 | 49.6 | 45.89 | 49.14 | 45.8 | 49.46 | 46.2 | 49.58 |
| Typical G/T | (1.6 dB LNB) | | (1.6 dB LNB) | | (1.6 dB LNB) | | (1.6 dB LNB) | |
| 10°(EL) | 21.52 dB/K | | 21.70 dB/K | | 21.69 dB/K | | 21.68 dB/K | |
| 20° (EL) | 22.04 dB/K | | 22.36 dB/K | | 22.32 dB/K | | 22.43 dB/K | |
| 30° (EL) | 22.24 dB/K | | 22.63 dB/K | | 22.58 dB/K | | 22.75 dB/K | |
| 40° (EL) | 22.34 dB/K | | 22.77 dB/K | | 22.71 dB/K | | 22.92 dB/K | |
| Beam Width (3 dB) | 0.92° | 0.59° | 0.86° | 0.59° | 0.87° | 0.57° | 0.83° | 0.56° |
| 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 | HG12KaL1618B69 | | HG12KaL2618B69 | | HG12KaC1618B69 | | HG12KaC2618B69 | |

※ All feed flange values G/T 20° elevation dry clear weather 18° C temperature no RF interference structure building wood land mountain front area.
G/T will be changed according to LNB input VSWR.

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Mechanical Specifications

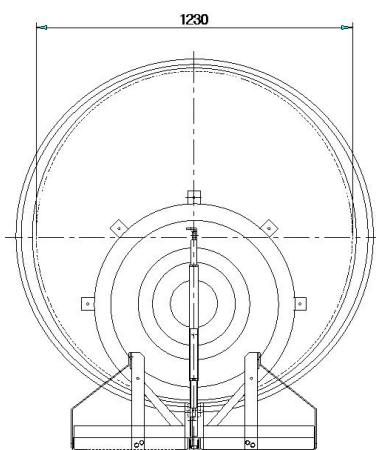
| | |
|--------------------------------|--|
| Antenna Diameter | 1.2 M |
| Antenna Type | Prime Focus and Offset Feed |
| Reflector | Glass Fiber Reinforced Polyester SMC or Aluminum |
| Mount Type | Elevation Over Azimuth(Square angle rate Mount) |
| Mast Pipe Size (Inch) (Option) | 2.0~ 3.0" |
| Azimuth Adjustment Range | 0 to 360° continuous |
| Elevation Adjustment Range | 5 to 90° continuous |
| Shipping Weight | 60 LBS(27.2Kg) |

Environmental Specifications

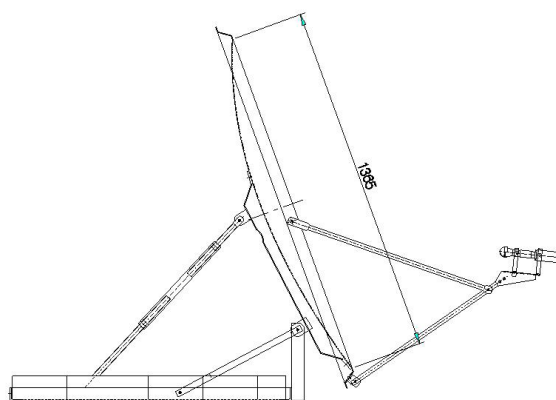
| | |
|--------------------------|---|
| Survival Wind Loading | 200 km/h |
| Operational Wind Loading | 72 km/h |
| Operational Temperature | -20° to + 50° C |
| Survival Temperature | -30° to + 60° C |
| Rain | up to 100 mm/h |
| Solar Radiation | 1 kw/m ² |
| Ice (Survival) | 1/2" radial |
| Shock 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)



Rear View



Side View