

# Diameter 6.4 M Dual Reflector Antenna

**Model No.** HGA - 6.4



**Options**

- Operational Band
  - X-Band Low PIM Antenna System
  - L, S, C, X, Ku, Ka, or DBS Band Antenna System
  - Extended Ku Antenna System
- Multiband Antenna System
- Deicing Systems (Heating)
- LNA , HPA , U/C or D/C System Integration
- Tracking Antenna System
- Step, Monopulse TT/C, Memory, or Manual track
- Turnkey Installation and Testing
- Packing for Sea and Air Transport
- Full Motion or Limit Motion
- Extended Azimuth Travel Range

## Electrical Specifications

Model	HG64KUL4		HG64CC4		HG64XC2		HG64DBL4		HG64KAC4	
Electrical	Ku-Band Linear Pol.		C-Band Circular Pol.		X-Band Circular Pol.		DBS-Band Linear Pol.		Ka-Band Circular Pol.	
Item	Rx : 2 Ports	Tx : 2 Ports	Rx : 2 Ports	Tx : 2 Ports	Rx : 1 Port	Tx : 1 Port	Rx : 2 Ports	Tx : 2 Ports	Rx : 2 Ports	Tx : 2 Ports
Frequency(GHz)	10.70 ~ 12.75	13.75 ~ 14.50	3.625 ~ 4.200	5.850 ~ 6.425	7.250 ~ 7.750	7.900 ~ 8.040	10.70 ~ 12.75	17.30 ~ 18.40	20.2 ~21.2	30.0 ~31.0
Gain(Mid:dBi)	55.6	57.6	46.76	50.5	52.2	52.8	55.45	59.21	60.7	63.6
Typical G/T (20° EL)	34.3 dB/K (11.725 GHz, 70K LNA)		28.60 dB/K (4 GHz, 30K LNA)		32.6 dB/K (7.5 GHz, 45K LNA)		34.3 dB/K (11.725 GHz, 70K LNA)		36.1 dB/K (20.7 GHz, 148K LNA)	
Beam Width (3 dB)	0.27°	0.22°	0.80°	0.51°	0.41°	0.38°	0.27°	0.18°	0.15°	0.11°
VSWR	1.3		1.25		1.25		1.3		1.3	
Antenna Noise Temperature										
5°(EL)	86 K	•	49 K	•	64 K	•	82 K	•	268 K	•
10°(EL)	75 K	•	41 K	•	52 K	•	69 K	•	256 K	•
20°(EL)	65 K	•	35 K	•	46 K	•	60 K	•	145 K	•
40°(EL)	61 K	•	31 K	•	44 K	•	54 K	•	136 K	•
Axial Ratio	N/A		0.50 dB		0.75 dB		N/A		0.75 dB	
CrossPolarization Isolation	35 dB		30.8 dB		27 dB		35 dB		27dB	
Port to Port Isolation										
Rx to Rx	35 dB	•	20 dB	•	20 dB	•	35 dB	•	20 dB	•
TxtoTx	•	35 dB	•	20 dB	•	20 dB	•	35 dB	•	20 dB
Txto Rx	-70 dB	•	-85 dB	•	*-120 dB	•	-85 dB	•	-85 dB	•
Rx toTx	•	-70 dB	•	-85 dB	•	*-120 dB	•	-85 dB	•	-85 dB
Side lobe Performance	ITU-R S.580		ITU-R S.580		ITU-R S.580		ITU-R S.580		ITU-R S.580	
Max Power	2KW CW		10KW CW		2KW CW		2.5KW CW		1KW CW	
RF Specification	H112132/R05T035		H106824/025		H109855/05		H111185/025		H112900/025/020	

※ All feed flange values G/T 20° elevation dry clear weather 18° C temperature no RF interference structure building wood land mountain front area

※ \*: X-Band Low PIM Option

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## Mechanical Specifications

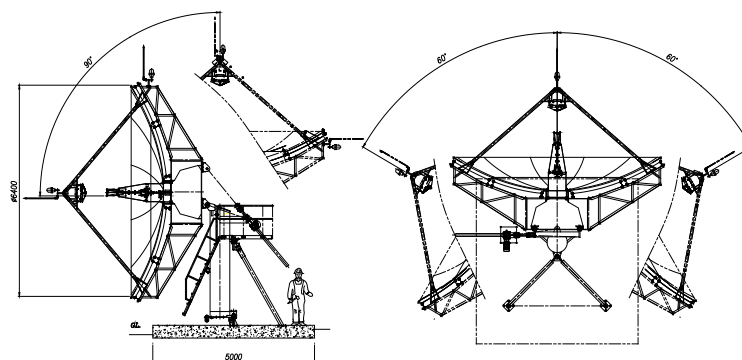
Antenna Diameter	6.4 M Dual Shaped Surface Reflector Type
Antenna Type	Kingpost Pedestal (Option Other Yoke & Tower)
Reflector	Shaping formed aluminum panels, galvanized steel back-up structure
Pedestal Configuration	Elevation over azimuth pedestal, constructed of galvanized steel
Azimuth Travel	±60° or 180°(3 segments @ 60°) Option Full Motion±270°(Yoke & Tower Type)
Elevation Travel	5 to 90° continuous
Azimuth Travel Rate	0.06°/sec (C-Band), 0.02°/sec (Ku-Band)Jack Screw
Elevation Travel Rate	0.06°/sec (C-Band), 0.02°/sec (Ku-Band)Jack Screw
Foundation (L x W x D)	5 x 5 x 0.5 m
Shipping Containers	one 40 ft standard, one 20 ft standard
Soil Bearing Pressure	10,000 kg/m <sup>2</sup>

## Environmental Specifications

Survival Wind Loading	200 km/h
Operational Wind Loading	72 km/h, gusting to 97 km/h
Operational Temperature	-20° to + 50°C
Survival Temperature	-30° to + 60°C
Rain	up to 100 mm/h
Relative Humidity	0 ~ 100 %
Solar Radiation	1000 kcal/h/m <sup>2</sup>
Ice (Survival)	2.5 cm on all surfaces or 1.3 cm on all surfaces with 130 km/h wind gusts
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)



Side View

Front View