Diameter 18.3 M Dual Reflector Antenna

Model No. HGA – 18.3

Options

- Operational Band
  – C–Band Extension
- Pedestal Full Motion Yoke Tower, Rail track or Limit Motion
- Linear or Circular
- Tracking System Step tracking, Memory tracking, or Program Tracking Aux Drive Manual Motor
- Hub Configuration Cooling Heating
- Feed System Linear Port or Circular Port
- Integrated LNA, HPA, A/C, or D/C
- Packing Sea and Air Line
- Turnkey Installation and Testing
- High Wind Load Low Temperature
- Dicing All Reflector

Electrical Specifications

Model	HG183CC4		HG183CL4		HG183CC/L4		HG183ECC/L4		HG183XC4	
Electrical	C–Band 4Ports Circular Pol.		C–Band 4Ports Linear Pol.		C–Band 4Ports CP (LP) Switchable		Ext C–Band 4Ports CP (LP)		X–Band 4Ports Circular Pol.	
Item	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit	Receive	Transmit
Frequency(GHz)	3.625 ~ 4.200	5.850 ~ 6.425	3.625 ~ 4.200	5.850 ~ 6.425	3.625 ~ 4.200	5.850 ~ 6.425	3.40 ~ 4.200	5.850 ~ 6.725	7.25 ~ 7.750	7.900 ~ 8.400
Gain(Mid;dBi)	56.1	59.5	56.2	59.4	56.2 (56.1)	59.5 (59.4)	56.0 (56.1)	59.7 (59.6)	61.5	62.2
Typical G/T (20° EL)	37.5 dB/K		37.6 dB/K		37.2(37.1) dB/K		37.3(37.3) dB/K		41.1 dB/K (45K LNA)	
Beam Width(3 dB)	0.275°	0.18°	0.265°	0.182°	0.26°	0.184°	0.263°	0.175°	0.14°	0.13°
VSWR	1.25		1.25		1.3		1.3		1.3	
Antenna Noise Temperature 5°(EL) 10°(EL) 20°(EL) 40°(EL)	 57 K 46 K 42 K 39 K	 • • • •	 55 K 44 K 40 K 37 K	 • • • •	 62 K 52 K 46 K 44 K	 • • • •	 59 (60) K 49 (50) K 43 (45) K 41 (43) K	 • • • •	 81 K 70 K 63 K 62 K	 • • • •
Axial Ratio	0.5dB		N/A		0.5 dB (N/A)		0.5 dB (N/A)		0.75dB	
Cross Polarization Isolation	30.8 dB		35dB		35 dB (30.7)		30.8 dB (35)	30.7 dB (35)	27.8dB	
Port to Port Isolation Rx to Rx TxtoTx Txto Rx Rx toTx	 –20 dB • –85 dB •	 • –20 dB • –85 dB	 –35 dB • –85 dB •	 • –35 dB • –85 dB	 –20(–35)dB • –85 dB •	 • –20(–35)dB • –85 dB	 –20(–35)dB • –85 dB •	 • –20(–35)dB • –85 dB	 –20 dB • *–120dB •	 • –20 dB • *–120dB
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	10KW CW		10KW CW		5KW CW		5KW CW		2KW CW	
RF Specification	H106824/025		H104729/015		H112823/05		H112820/035(H112821/05)		H113095/05	

※ 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

Diameter 18.3 M Dual Reflector Antenna

Mechanical Specifications

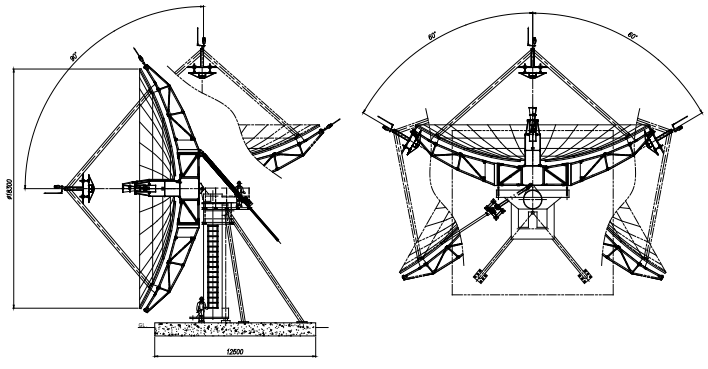
Antenna Diameter	18.3 M Dual Shaped Surface Reflector Type
Antenna Type	Kingpost Pedestal (Option Other Yoke & Tower, WheelonTrack)
Reflector	Shaping formed aluminum panels, galvanized steel back-up structure
Pedestal Configuration	Elevation over azimuth pedestal, constructed of galvanized steel
Azimuth Travel	±60° or 180°(3segments@60°) Option Full Motion±270°(Yoke, Tower & Wheel on Track)
Elevation Travel	5 to 90° continuous
Azimuth Travel Rate	0.02°/secJack Screw
Elevation Travel Rate	0.02°/secJack Screw
Foundation (L x W x D)	12.5 x 12.5 x 0.8 m
Shipping Containers	six 40 ft open top, four 40 ft standard, two 40 ft flat rack
Soil Bearing Pressure	10,000 kg/m^2

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/㎡
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