

Ø 11.1 M Dual Reflector Antenna

Model No. HGA - 11.1



Option

- Operation Band
 - L,S,C,Ku,Ka,X or EXT C, Ku Band Antenna System
- Limit Motion or Full Motion
- Polarization CP/LP Simultaneous Switching Feed
- Multi Band antenna system (X/Ku, X/Ka, C/Ku)
- Reflector and Feed deicing System
- Tracking System (Step track, Monopulse track, Program track, Orbit Predict track)
- Integrated transmit cross-axis kits
- Rx only, Rx, or Tx Simultaneous System
- Environmental Hub Configuration
- Feed System Linear or Circular Monopulse Coupler X-Band Low PIM Feed Dual Pol. or 4 Pol.
- Integrated LNA (LNB), HPA, U/C, or D/C
- Packing for sea and air transport
- High Power Configuration

Electrical Specifications

Model	HG111KUL4		HG111CC(L)4		HG111XC2	
Electrical	Ku-Band Linear Pol.		C-Band Circular (Linear) Pol.		X-Band Circular Pol.	
Item	Rx : 2 Ports	Tx : 2 Ports	Rx : 2 Ports	Tx : 2 Ports	Rx : 1 Port	Tx : 1 Port
Frequency (GHz)	10.70 ~ 12.75	13.75 ~ 14.5	3.625 ~ 4.200	5.850 ~ 6.425	7.250 ~ 7.750	7.900 ~ 8.400
Gain (Mid: dBi)	60.35	62.1	51.9 (52.0)	55.6 (55.7)	57.15	57.85
Typical G/T (20° EL)	38.8 dB/K (11.725 GHz, 70 K LNA)		33.4 (33.5) dB/K (4 GHz, 30 K LNA)		37.1 dB/K (7.5 GHz, 45 K LNA)	
Beam Width (3 dB)	0.16°	0.14°	0.44° (0.44°)	0.29° (0.29°)	0.24°	0.22°
VSWR	1.3		1.25 (1.25)		1.3	
Antenna Noise Temperature						
5° (EL)	96 K	•	56 (52) K	•	74 K	•
10° (EL)	81 K	•	45 (46) K	•	63 K	•
20° (EL)	73 K	•	40 (38) K	•	57 K	•
40° (EL)	68 K	•	37 (35) K	•	55 K	•
Axial Ratio	N/A		0.5 dB (N/A)		1.0 dB	
Cross Polarization Isolation	35 dB		30.8 dB (35.0)		24.9 dB	
Port to Port Isolation						
Rx to Rx	-35 dB	•	-20 (-35) dB	•	•	•
Tx to Tx	•	-35 dB	•	-20 (-35) dB	•	•
Tx to Rx	-85 dB	•	-85 dB	•	*-27 (-110) dB	•
Rx to Tx	•	-70 dB	•	-70 dB	•	*-27 (-110) dB
Side lobe Performance	ITU-R S.580		ITU-R S.580		ITU-R S.580	
Power Handling	2kW CW		10kW CW		5kW CW	
RF Specification	H112132/R05T035115		H106824/025 (H104729/015) 115		H109855/04115	

* All values are at rear feed flange.

* Typical G/T at 20° elevation with dry clear weather 18°C temperature and clear horizon by using single LNA.

* X-Band Low PIM Option