

RF performance

	Ku-Band GV-120 Series	Ka-Band GV-120 Series
F/D	0.8	0.8
Operating frequency	TX : 13.75 – 14.50 GHz RX : 10.70 – 12.75 GHz	TX : 29.25 – 31.00 GHz RX : 19.20 – 21.20 GHz
Gain (± 0.3 dBi)	TX : 43.72 dBi @ 14.50 GHz RX : 41.79 dBi @ 12.75 GHz	TX : 49.96 dBi @ 30.00 GHz RX : 46.80 dBi @ 19.50 GHz
3 dB beamwidth	TX : 1.15° @ 14.50 GHz RX : 1.23° @ 12.75 GHz	TX : 0.5° @ 30.00 GHz RX : 0.9° @ 19.50 GHz
Sidelobe Envelope, TX Co-Pol dBi		
29 - 25log θ dBi	$100\lambda/D \leq \theta \leq 7^\circ$	$100\lambda/D \leq \theta \leq 20^\circ$
8 dBi	$7^\circ < \theta \leq 9.2^\circ$	$20^\circ \leq \theta \leq 26.3^\circ$
32 - 25log θ dBi	$9.2^\circ < \theta \leq 48^\circ$	$26.3^\circ \leq \theta \leq 48^\circ$
-10 dBi	$48^\circ < \theta \leq 180^\circ$	$48^\circ < \theta \leq 180^\circ$
Antenna Cross-Polarization within 1dB b/w	TX : > 25 dB RX : > 23 dB	TX : > 25 dB RX : > 22 dB
VSWR	1.3 : 1 Max.	1.3 : 1 Max.

Mechanical performance

Material	Steel
Antenna Optics	One-piece offset feed prime focus
Mount Type	Elevation over azimuth
Elevation Adjustment Range	0° - 90° continuous fine adjustment; fine adjustment accuracy $\leq 0.1^\circ$
Azimuth Adjustment Range	360° continuous; $\pm 3^\circ$ fine adjustment; fine adjustment accuracy $\leq 0.1^\circ$
Mast Pipe Size	76mm OD (3 inch)
Wind Loading (Operational)	80 km/h
(Survival)	180 km/h
Temperature (Operational)	-40°C to 60°C
Rain (Operational)	10 mm/h
Atmospheric Conditions	Salt, Pollutants and Contaminants as encountered in coastal and industrial areas: 720 hours ASTM B117 salt spray
Humidity	0 to 100% with condensation

Please note that product designs and specifications are subject to refinement and may evolve from the descriptions provided.



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