

RF performance Azure Shine reflector with Azure Shine Feed-OMT-TRF-WG Assembly

	Ku-Band GV-75 Series
F/D	0.8
Operating frequency	TX : 13.75 – 14.50 GHz RX : 10.70 – 12.75 GHz
Gain (± 0.3 dBi)	TX : 39.80 dBi @ 14.25GHz RX : 37.30 dBi @ 11.70 GHz
3 dB beamwidth	TX : 1.15° @ 14.50 GHz RX : 1.31° @ 12.75 GHz
Sidelobe Envelope, TX Co-Pol dBi	
29-25log θ dBi	$100\lambda/D \leq \theta \leq 7^\circ$
8 dBi	$7^\circ < \theta \leq 9.2^\circ$
32-25log θ dBi	$9.2^\circ < \theta \leq 48^\circ$
-10 dBi	$48^\circ < \theta \leq 180^\circ$
Antenna Cross-Polarization within 1dB b/w	TX : > 25 dB RX : > 23 dB
VSWR	1.3 : 1 Max.
Certification	Eutelsat type approved



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 ≤ 0.1 degree
Azimuth Adjustment Range	360° Continuous; $\pm 3^\circ$ fine adjustment; fine adjustment accuracy ≤ 0.1 degree
Mast Pipe Size	60mm OD (2.36 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

