



TELEDISTRIBUTION
E Q U I P M E N T
MATV/CATV



GEMINI G60 Satellite Antenna

PERFORMANCE CHARACTERISTICS

Reflector Type	Offset elliptical, cross formatted
Gain @ 12.5 GHz, typical	36.5 dBi
Cross Polarisation	£-25dB to -1 dB copolar beamwidth, < 19-25 log (q) off boresight
Off Axis Sidelobe Performances	All antennae comply with 29 - 25log(q) if correctly illuminated.
G/T @ 12.5 GHz 30° elevation	16.3 dB/°K
Offset Angle	20.1°
Elevation Adjustment	10° to 80°
Dimensions (width x height)	685mm wide x 600mm high
Wind Load	0.55 kN
Mast Diameter	38-54mm
Operational Windspeeds	100km/hr Gusting 130 km/hr.
Survival Windspeeds	Maintains survival condition at 200 km/hr
Feed Clamp Diameters	25, 40 mm clamps and reducers are available
Reflector Material	Zinc Coated Steel G3NS Z275
Fasteners	Metric Hexagon and Combination Recess Head, Zinc plated and chromate passivated to AS1897-1976 and AS1791-1986
Surface Coating	Electrostatic Polyester Dark Grey to BS3900
Service Life	Reflector tested to 700 hours salt spray exposure to ASTM B117-94 in accordance with AS3715-1989 Appendix 13.

Notes:

RF Gain performance values are derived from range testing by Hills Industries and others. Dish gain has been calculated from the E and H plane patterns using the ANSI/ EIA-411-A-1986 formula:

$$G = 10 * \log_{10} [(31000 / (\theta_{3E} * \theta_{3H}) + 91000 / (\theta_{10E} * \theta_{10H})) / 2]$$

where θ is the beamwidth at -3dB and -10dB in the E and H planes.

Table values apply at 12.5 GHz and will vary with respect to received signal frequency. Gain related performance values are typical and are subject to production tolerances of ± 0.3 dB

The value for G/T includes amplifier noise for an LNB with a noise figure of 1.0 dB

Wind Loads are worst case values for W41 situations and are calculated in accordance with AS1170.2-1989.