

# Antenna Specification Sheet

## RF Performance

Antenna Part Number		G50	G70	G90	G120
Antenna Dimensions ( w x h )		59.9 x 51.2	67.5cm x 59.5	87cm x 77.5cm	144cm X 119cm
Operating Frequency	Rx	10.75 - 12.75 Ghz	10.75 - 12.75 Ghz	10.75 - 12.75 Ghz	
Polarisation		Linear	Linear	Linear	
Gain ( min ) @ 10.7 GHz		34.4 dBi	35.4 dBi	37.9 dBi	Currently In Development
@ 11.7 GHz		35.0 dBi	36.0 dBi	38.3 dBi	Specifications Available Feb 07
@ 12.75 GHz		35.9 dBi	36.9 dBi	39.2 dBi	
3dB Beamwidth ( Max ) @ 10.75 GHz		2.7°	2.4°	2.2°	
@ 11.7 GHz		2.4°	2.2°	2.0°	
Sidelobe Envelope ( ETSI 300 159 )		29-25 Log $\theta$ for $2.5^\circ < \theta < 7^\circ$ 8 for $7^\circ < \theta < 9.2^\circ$ 32-25 Log $\theta$ for $9.2^\circ < \theta < 48^\circ$ -10 for $\theta > 48^\circ$	29-25 Log $\theta$ for $2.5^\circ < \theta < 7^\circ$ 8 for $7^\circ < \theta < 9.2^\circ$ 32-25 Log $\theta$ for $9.2^\circ < \theta < 48^\circ$ -10 for $\theta > 48^\circ$	29-25 Log $\theta$ for $2.5^\circ < \theta < 7^\circ$ 8 for $7^\circ < \theta < 9.2^\circ$ 32-25 Log $\theta$ for $9.2^\circ < \theta < 48^\circ$ -10 for $\theta > 48^\circ$	
Antenna Cross-Polarisation		> 26 dB on axis > 21 dB elsewhere	> 26 dB on axis > 21 dB elsewhere	> 26 dB on axis > 21 dB elsewhere	

## Mechanical Performance

Reflector Material		Steel	Steel	Steel	Steel
Antenna Optics		Offset Prime Focus	Offset Prime Focus	Offset Prime Focus	Offset Prime Focus
Mount Type		Elevation over Azimuth	Elevation over Azimuth	Elevation over Azimuth	Elevation over Azimuth
Elevation Adjustment Range		0° to 50°	0° to 50°	0° to 50°	0° to 50°
Azimuth Adjustment Range		360°	360°	360°	360°
Wind Loading	Operational Survival	100km/H 200km/H	100km/H 200km/H	100km/H 200km/H	100km/H 200km/H
Temperature		-50 to +80°C	-50 to +80°C	-50 to +80°C	-50 to +80° C
Humidity		0 to 100% condensation	0 to 100% condensation	0 to 100% condensation	0 to 100% condensation
Atmosphere		Salt, Pollutants and Contaminants encountered In coastal and Industrial areas.			
Solar Radiation		1120 W/m <sup>2</sup>	1120 W/m <sup>2</sup>	1120 W/m <sup>2</sup>	1120 W/m <sup>2</sup>
Shock & Vibration		As encountered during shipping and handling			
Wall mount supplied		Swinging arm wall mount			
Mast Pipe Interface		40 - 62mm	40 - 62mm	40 - 62mm	45 - 76mm



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