

PATRIOT[®]

SATELLITE ANTENNA SYSTEMS

Intelsat
Approved

Dual Optics SMC

Eutelsat
Approved

RF SPECIFICATIONS	RECEIVE	TRANSMIT
Frequency band	10.7 ~ 12.75 GHz	13.75 ~ 14.5 GHz
3dB beamwidth	1.9° @ 11.7 GHz	1.6° @ 14.25 GHz
Gain @ 11.7 GHz	38.3dB	40dB
output/input flange	WR 75	WR 75
G/T (40° elevation) @ 11.7 GHz	17.9 dBK (F Lnb=1.0dB)	
Antenna XPD (including OMT)		> 30dB (1dB contour)
Isolation Rx/Tx		40dB
Isolation Tx/Rx		75dB min
VSWR		1.3:1 max
MECHANICAL DATA		
Geometry	offset gregorian	
Main Reflector	glass fiber reinforced polyester	
Sub-Reflector	aluminum molded	
Mount	Az-EI Type	
Azimuth Range	0 ~ 360° with ±5° fine tune adjustment	
Elevation Range	20 ~ 70° with ±5° fine tune adjustment	
Pipe Diameter	60 ~ 80 mm	
Weight	21 Kg without HPA	
Temperature	-40°C ~ 70°C	
Operational Windspeed	100 Km/h with bursts up to 130 Km/h	

Copolar sidelobe envelope (dBi):

$$2.5^\circ \leq \theta \leq 7^\circ$$

$$7^\circ < \theta \leq 9.2^\circ$$

$$9.2^\circ < \theta \leq 48^\circ$$

$$\theta > 48^\circ$$

$$29 - 25 \log \theta$$

$$8$$

$$32 - 25 \log \theta$$

$$-10$$

Cross polar sidelobe envelope (dBi):

$$2.8^\circ < \theta \leq 7^\circ$$

$$7^\circ < \theta \leq 9.2^\circ$$

$$19 - 25 \log \theta$$

$$-2$$

