

3.8 m FCC Compliant Offset Tx/Rx Antenna System

TXINT-380

RF SPECIFICATIONS		Circular Single Optic		Linear Single Optic	
C-Band	Receive	Transmit	Receive	Transmit	
Frequency in GHz	3.625 - 4.20	5.850 - 6.425	3.40 - 4.20	5.7 - 6.725	
Midband Gain (Rx/Tx)					
	42.1 dB	46.2 dB	42.3 dB	46.3 dB	
Antenna Noise Temperature at 30° Elevation	35 K		30 K		
Typical G/T @ 30° EL 3.912 GHz					
Clear Horizon w/ 50 K LNA		23.0 dB/K			23.1dB/K
Cross Pol Isolation on Axis (4port)	17.7 dB	27.3 dB	30.0 dB	35.0 dB	
within 1 dB Beamwidth	17.7 dB	27.3 dB	22.0 dB	26.0 dB	
Return Loss	17.7 dB	19.0 dB	17.7 dB	19.0 dB	
RF SPECIFICATIONS		Linear Dual Optic		Linear Single Optic	
Ku-Band	Receive	Transmit	Receive	Transmit	
Frequency in GHz	10.70 - 12.75	13.75 - 14.50	10.70 - 12.75	13.75 - 14.50	
Midband Gain	51.8 dB	53.5 dB	51.8 dB	53.5 dB	
Antenna Noise Temperature at 30° Elevation	30 K		30 K		
Typical G/T @ 30° EL 11.725 GHz					
Clear Horizon w/ 80 K LNA	31.4 dB/K				31.4 dB/K
Cross Pol Isolation on Axis	30.0 dB	35.0 dB	30.0 dB	35.0 dB	
within 1 dB Beamwidth	30.0 dB	35.0 dB	22.0 dB	26.0 dB	
Return Loss	17.7 dB typ	20.0 dB	17.7 dB typ	20.0 dB	
RF SPECIFICATIONS				Circular Single Optic	
X band			Receive	Transmit	
Frequency in GHz			7.25 - 7.75	7.9 - 8.4	
Midband Gain			47.8 dBi	48.5 dBi	
Antenna Noise Temperature at 30° Elevation			30 K		
Typical G/T @ 30° EL 11.725 GHz					
Clear Horizon w/ 80 K LNA					27.4 dB/K
Cross Pol Isolation on Axis			23.0 dB	21.0 dB	
within 1 dB Beamwidth			23.0 dB	21.0 dB	
Return Loss			20.0 dB	20.0 dB	
Tx/Rx Sidelobe Level					
		29 - 25 log θ	100 λ /D < θ < 20°		
		-3.5	20° < θ < 26.3°		
		32 - 25 log θ	26.3° < θ < 48°		
		-10	48° < θ		
Mechanical Specs					
Mount	Motorized Kingpost w/180° H to H Mount or Az/EI Motorizable Kingpost Mount Elevation adjustment 0-120° Azimuth 180°)				
Kingpost Mount	Hot-Dip Galvanized				
Reflector Structure	Aluminum with powder coating on reflector surface				
Environmental Specs					
Windload Operational / Survival	45 mph gusts of 60/125 mph				
Ambient Temp. Operational	-40° to 122°F		-40° to 50°C		
Ambient Temp. Survival	-40° to 140°F		-40°C to 60°C		
Relative Humidity	0% to 100%				

Call For Specialty 4-Port Feed Assemblies



ATRIOT Antenna Systems
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All product specifications subject to change without notice.

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TX380-KLOF
TX380-CLOF
TX380-CCOF

Features

- Motorized Kingpost w/180° H to H, or Az/EI Motorizable Kingpost Mount
- Extra support ribs for added rigidity in wind
- Diameter = 12.5 ft., 3.81m
- High Wind Load Options Available
- Easy To Ship, Installation without Crane
- Sub-Reflector Option for Ku-Band Low Cross Pol Applications
- Various Frequency and Feed Options
- Long Focal Length for Excellent Sidelobe Rejection

Description

Solid Performer Ideal for Commercial C-Band and Ku-Band Applications

Need a more cost effective solution for a 3.8 meter C-band or Ku-Band transmit/receive antenna? Many customers require the extra link margin that a larger antenna like a 3.8 meter can provide, for the hub station in their VSAT networks, a video uplink, or an SCPC central station. However, affordable prices are not often found when considering the other antennas on the market. The Patriot 3.8 meter offset is the affordable, flexible choice. Every Az/EI fixed Kingpost antenna is fully upgradable in the field to a Dual-Axis Motorized antenna with 180° H to H Mount.

Patriot's newest offset antenna is not just affordable, it's a solid performer. The stretch formed 3.8 meter antenna with kerf panels provides superior surface accuracy. This antenna allows for easy installation without the need for a crane or a lifting device.