



PFA-240X/Y

The PFA-240X/Y Deployable X/Y Leo Tracking Antenna pedestal technology is designed specifically for short-term and permanent LEO satellite tracking applications requiring rapid deployment. Designed around our tried-and-true X/Y technology precision antenna systems, this solution can be transported on a commercial airline and set up in a very brief amount of time without the need for any special equipment.

The antenna's operation modes include standby, manual control, pointing, program tracking, auto tracking, and memory tracking.

Dual GPS allows for precise direction finding and positioning. Utilizing the high-precision resolver enables automatic calculation of altitude data, angle data, and coordinate conversion. Programmatically directing the antenna to the target with precision and accuracy enables precise tracking.

The antenna system's power supply is a wide-range AC 220V, and the power supply mode can be tailored to the customer's specifications.

Key Features

- L, S, X, Ku and Ka-Band versions are available
- Motorized and manual control modes for the convenience of emergency operation under various environments
- Provides high-speed and automatic tracking for GEO, LEO, MEO satellites and UAVs
- Portable, Compact, Light-Weight, Rugged Construction
- Satellite position storage and modification function for the satellite position parameters of at least 10 satellites
- High Reliability and Accuracy
- High Torque and Zero- Backlash
- Fast Slew Rates



GENERAL SPECIFICATIONS

Reflector Diameter	2.4m	
Reflector Type	Ring Focus Parabolic	
Drive Rate	X/Y Axis	0.1° - 5° / S
Antenna Motion Range	Y Axis	± 90°
	X Axis	± 90°
Motor	DC Servo	
Power Supply	220V AC 50Hz	
Power Consumption	< 2kW	
Weight	≤ 280Kg	

RF CHARACTERISTIC

		L-Band	S-Band	X-Band	Ku-Band	Ka-Band
Frequency (GHz)	Rx	1.4 - 1.7	2.2 - 2.4	7.9 - 8.4	13.7 - 14.5	27.5 - 31.0
	Tx	1.4 - 1.7	2.2 - 2.4	7.25 - 7.75	10.70 - 12.75	17.7 - 21.2
Antenna Gain (±0.2 dBi) (Mid Band)	Rx	28.9	32.3	43.9	48.7	54.4
	Tx	28.9	32.3	43.8	47.1	50.6
WSVR		≤ 1.5:1	≤ 1.5:1	≤ 1.3:1	≤ 1.3:1	≤ 1.5:1
Polarization		Dual Circular	Dual Circular	Circular	Linear	Circular
1st Side Lobe		≤ -14	≤ -14	≤ -14	≤ -14	≤ -14
Axial Ratio (dB)		≤ 2.0	≤ 2.0	≤ 1.5	≤ 35 (Cross Pol.)	≤ 1.4
Interface		N-50K	N-50K	WR112	WR75	

ENVIRONMENTAL SPECIFICATIONS

Temperature	Operating	-40°C - +55°C
	Survival	-40°C - +70°C
Wind Speed	Operating	50 km/h
	Survival	72 km/h
Grade	IP65	
Solar Radiation	1135W/m2	
Humidity	98%	
Ice Loading	50mm	
Survival Rainfall	20 cm/h	

Compliances / Certificates



TURKEY

P : +90 216 540 72 57

M : sales@pals.com.tr

W : www.pals.com.tr

NETHERLANDS

P : +31 6 85 52 63 16

M : sales@pals-comsat.com

W : www.pals-comsat.com

