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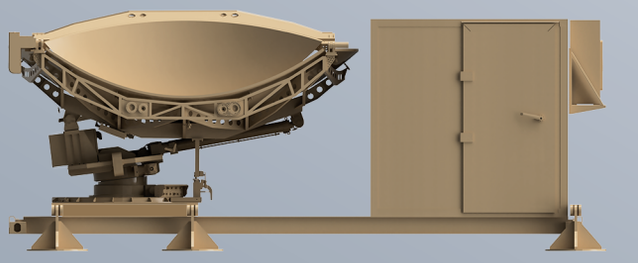
PTA-370-MIL

Go Anywhere with High Performance



PTA-370-MIL

The PTA-370-MIL is a rapidly deployable, multi-band tactical antenna designed for mission-critical connectivity. Its robust elevation over azimuth antenna positioner ensures precise satellite acquisition and stable high-capacity links.

The transportable and foldable system enables swift deployment in minutes for immediate operational support. Carbon-fiber main reflector electrically foldable and allows rapid folding.

Built for maximum flexibility, it operates across multiple frequency bands to adapt to diverse tactical scenarios. This multi-band capability, combined with its MIL-STD-810G ruggedized construction, guarantees reliable performance in the harshest environments. From rapid deployability to spectral agility, the PTA-370-MIL delivers essential, resilient communications.

COMPATIBILITY

- MIL-STD-810G Compliant
- MIL-STD-461F Compliant
- MIL-STD-1472 Compliant
- MIL-STD-188-164A Compliant
- ITU-RS-580 Compliant
- ITU-RS-465-6 Compliant

Key Features

- Modular Multi-Band Capacity (X,Ku,Ka Bands)
- LEO Tracking Optional
- Feed Replacement under 90 minutes
- Elevation over Azimuth Antenna tracking system
- System expansion and collection time: Automatic ≤8 minutes, manual ≤20 minutes.
- Single 20ft (6M) ISO 1C skid configuration
- Support DVB-S/DVB-S2, beacon in satellite locking within 15 minutes
- High-Accuracy GPS & Anti-Interference Electronic Compass
- Manual drive tool kit for emergency situations
- High gain, low side-lobe, high accuracy and very good cross polar rejection
- Beacon Tracking
- Optional De-Ice System

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GENERAL SPECIFICATIONS

Reflector Diameter	3.7m
Reflector Type	Dual Optic
Operation On-Air Time	~3 Minutes
Antenna Concept	Dual Optic, antenna with 3.7m Carbon-Fiber main reflector

RF CHARACTERISTIC

		C-Band	X-Band	Ku-Band	Ka-Band
Frequency (GHz)	Tx	5.85~6.725 GHz	7.9~8.4 GHz	13.75~14.50 GHz	27.5~31.0 GHz
	Rx	3.4~4.2 GHz	7.25~7.75 GHz	10.7~12.75 GHz	17.7~21.2 GHz
Antenna Gain (±0.2 dBi) Mid Band	Tx	≥44.8+20	≥47.2+20	≥52.1+20	≥58.5+20
	Rx	≥41.2+20	≥46.4+20	≥50.8+20	≥55.1+20
Polarization		Circular	Circular	Linear	Circular
First Sidelobe		≤ -14 dB			
Sidelobe envelope		Radiation Pattern Compliancy: Compliant MIL-STD-188-164A, ITU-RS-580 and ITU-RS-465-6			
Port to Port isolation		RX TX：≥ 40 dB	TX RX：≥ 90 dB		
VSWR	Tx	≤ 1.5			
	Rx	≤ 1.5			
Axis ratio		≤ 1.5dB (Axial)	≤ 1.5dB (Axial)		≤ 1.5dB (Axial)
Cross-polarization isolation (For Ku)		≥35dB (Axial)			
Noise temperature		≤52K	≤70K	≤80K	≤170K (El 10°, windless, sunny)
Feed interface	Tx	WR137	WR112	WR75	WR28
	Rx	WR229	WR112	WR75	WR42
Tracking accuracy		Better than 1/7 of the beam width(R.M.S)			

MECHANICAL SPECIFICATIONS

	Azimuth	Elevation	Polarization
Range of Motion	≥± 180°	0~90°	≥±90°(Ku band)
Speed of Motion	0.1~15°/s	0.1~5°/s	0.1~3°/s
System weight	≤ 2000 Kg (Power amplifier, LNB, packaging and accessories are not included)		
Storage size	≤3700mm×2400mm×1985mm (LxWxH)		

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-40°C~+55 °C	Storage temperature	- 50°C~+70 °C
Operating wind speed	≤40 km/h	Survival wind speed	≤72 km/h
Humidity requirements	Not more than 95% (20 °C)		
Protection grade	IP 65		

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