



STANDARD
MIL-STD
810

STANDARD
MIL-STD
461

Size:

3.7m

PTA-370-MIL

Mission-Ready Rapid Deployment

The PTA-370-MIL is a rapidly deployable, multi-band tactical antenna designed for mission-critical connectivity. Its transportable, foldable design, featuring a carbon-fiber main reflector, enables swift deployment in minutes for immediate operational support wherever needed.

Precision & Rugged Performance

The system utilizes a robust elevation over azimuth positioner for precise satellite acquisition and stable high-capacity links. Built to MIL-STD-810G standards with ruggedized construction, it guarantees reliable performance and resilient communications in the harshest environmental conditions.

Spectral Agility for Tactical Flexibility

Engineered for maximum operational flexibility, the PTA-370-MIL operates seamlessly across multiple frequency bands to adapt to diverse and evolving tactical scenarios. This essential multi-band capability ensures forces maintain a critical communications advantage across the entire battlefield.

Key Features

- Modular Multi-Band Capacity; S, C, X, Ku, Ka
- Foldable reflector
- Feed Replacement under 90 minutes
- Elevation over Azimuth, Optional Train
- System expansion & collection time: Automatic ≤15 minutes, manual ≤40 minutes.
- Single ISO skid configuration
- Optional GEO/LEO Tracking
- Optional Beacon Tracking
- Optional De-Ice System
- Optional Monopulse Feed



Scan the QR code for more information.

TECHNICAL SPECIFICATIONS / PTA-370-MIL

GENERAL SPECIFICATIONS

Reflector Diameter	3.7m
Reflector Type	Ring Focus
Reflector Material	Carbon-Fiber
Operation On-Air Time	Automatic ≤15 minutes, manual ≤40 minutes.
Antenna Concept	Dual Optic, antenna with 3.7m Carbon-Fiber main reflector

MECHANICAL SPECIFICATIONS

	S-Band	C-Band	X-Band	Ku-Band	Ka-Band
Frequency (GHz) Tx	2.025~2.120	5.85~6.725		13.75~14.50	27.5~31.0
Frequency (GHz) Rx	2.2~2.3	3.4~4.26	7.70~8.50	10.70~12.75	17.7~21.2
Antenna Gain (±0.2 dBi) @Midband Tx	≥34.6+20lg (f/2.07GHz)	≥44.8		≥52.1	≥58.5
Antenna Gain (±0.2 dBi) @Midband Rx	≥35.4+20lg	≥41.2	≥46.6+20lg (f/8.0GHz)	≥50.8	≥55.1
Polarization	Circular	Circular	Circular	Linear	Circular
Port to Port Isolation	90 dB	≥40 dB			
Axis Ratio		≤1.5dB (Axial)			
Cross-Polarization Isolation	20		20	≥35dB (Axial)	
Radiation Pattern Compliance	Compliant with MIL-STD-188-164A, ITU - RS-580 and ITU-RS-465-6				
Noise Temperature	Ta≤80K	≤52K	Ta≤50K	≤80K	≤170K (Ei 10°, windless, sunny)
Feed Interface Tx	WR430	WR137	WR112	WR75	WR28
Feed Interface Rx	WR430	WR229	WR112	WR75	WR42
G/T (dB/K)	≥13.9+20lg (f/2.25GHz)		≥25.6+20lg (f/8.0GHz)		

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
Storage Dimensions	≤3700mm×2400mm×1985mm (LxWxH)		

ENVIRONMENTAL SPECIFICATIONS

	PTA-370-MIL
Temperature Range Operational	-40°C~+55 °C
Temperature Range Survival	-50°C~+70 °C
Wind Speed Operational	80 km/h
Wind Speed Survival	130 km/h
Relative Humidity	2% to 98% (25 ° C), no condensation

Specifications are subject to change.

