



Size:

1.0m

PXY-100

Ultra-Mobile X/Y Pedestal for Multi-Orbit Satellites

The PXY-100 Deployable X/Y Leo Tracking Antenna pedestal is engineered for quick-deployment LEO satellite tracking, suitable for both short-term and permanent missions. Built on proven X/Y precision technology, this system transports via commercial airline and sets up rapidly without requiring special equipment or tools.

Dual-GPS Precision Positioning

Built for absolute field flexibility, the terminal supports standby, manual, pointing, program, auto, and memory tracking modes. It achieves autonomous target acquisition by locking onto modem SNR, beacon, or carrier signals without external equipment. Real-time spectrum monitoring is available via an intuitive web interface or an ACU-connected tablet, while dual GPS receivers ensure a swift multi-orbit lock.

Precision Tracking & Modular Architecture

Driven by a high-performance servo mechanism, the terminal delivers seamless, zero-keyhole tracking during high-speed satellite passes. Its modular design allows a single operator to quickly swap sub-components and switch frequency bands in the field. For optimal tactical efficiency, a single power source feeds all critical internal modules, while tool-less quick-release captive bolts ensure effortless hardware replacements and firmware updates.

Key Features

- Precision Carbon Fiber Reflector
- Quickly Replaceable Feed and RF Chain
- Integrated Monitoring System on web GUI
- Modular Design
- 10MHz High Stability Reference
- TLE tracking
- Embedded Spectrum Analyzer Display (Optional)
- Auto Pointing on Beacon/DVB/Modem/SNR
- Overhead full tracking capability
- Easy to deploy



Scan the QR code for more information.

TECHNICAL SPECIFICATIONS / PXY-100

GENERAL SPECIFICATIONS

Reflector Diameter	1.0m Carbon-Fiber
Reflector Type	Segmented
Tracking Method	Sun, TLE, Program Tracking
Power Supply	1 Phase 120-240 VAC 50/60 Hz
DC Power Input	24 to 48VDC

RF CHARACTERISTIC

	X-Band	Ku-Band	Ka-Band
Frequency (GHz) Tx	7.90 ~ 8.40	13.75 ~ 14.50	27.50 ~ 31.00
Frequency (GHz) Rx	7.25 ~ 7.75	10.70 ~ 12.75	17.70 ~ 21.20
Antenna Gain @ Midband (±0.2 dBi) Tx	≥ 36.4	≥ 41.4	≥ 46.7
Antenna Gain @ Midband(±0.2 dBi) Rx	≥ 35.7	≥ 39.8	≥ 43.2
RF interface	WR-112	WR-75	Tx WR-28, Rx WR-42
Power Capacity	≤ 200w	≤ 100w	≤ 100w
Antenna Pattern Compliance	Compliant with MIL-STD-188-164C, ITU-R S.580-6 & ITU-R S.465-6		

MECHANICAL SPECIFICATIONS

	X	Y	Polarization for Ku-Band
Antenna Travel Range	± 90 °	± 90 °	± 90 °
Antenna Drive Rate	0.1° ~ 6°/s	0.1° ~ 6°/s	0.1° ~ 6°/s
Antenna Acceleration	5° / sec ²	5° / sec ²	3° / sec ²

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational	-30°C ~ +55°C
Temperature Range Survival	-40°C ~ +70°C
Wind Speed Operational	Gusting 72 km/h
Wind Speed Survival	Gusting 120 km/h
Protection Grade	IP65
Solar Radiation	1135W/m2
Relative Humidity	%100 Condensed

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Specifications are subject to change.

