



STANDARD
MIL-STD
810

STANDARD
MIL-STD
461

STANDARD
MIL-STD
188-164

Size:

1.20m

PXY-120

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

The PXY-120 is an ultra-mobile, small-footprint X/Y pedestal solution engineered for rapid high-speed connectivity across LEO, MEO, GEO, and HEO regimes. Fully compliant with MIL-STD-810 and MIL-STD-461, this agile system packs into compact transit cases for effortless tactical deployment, achieving a complete tool-free setup in less than 30 minutes.

Mission Agility Target Acquisition

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-120

GENERAL SPECIFICATIONS

Antenna Diameter	1.2m 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	≥ 37.8	≥ 42.8	≥ 48.7
Antenna Gain @ Midband(±0.2 dBi) Rx	≥ 37.2	≥ 41.5	≥ 45.3
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 Axis	Y Axis	Polarization
Antenna Travel Range	± 90 °	± 90 °	± 90 °
Antenna Drive Rate	0.1° - 6° /s	0.1° - 6° /s	0.1° - 6° /s
Antenna Acceleration	5° / sec²	5° / sec²	3° / sec²

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.

