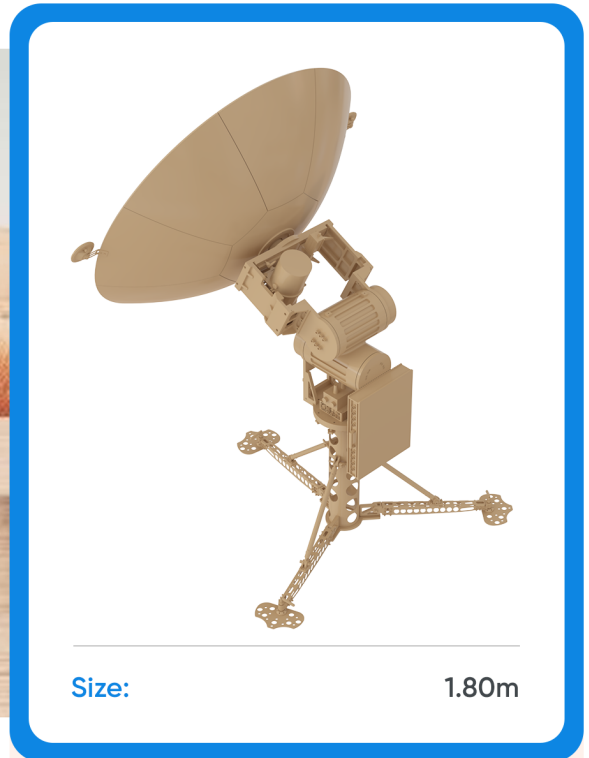
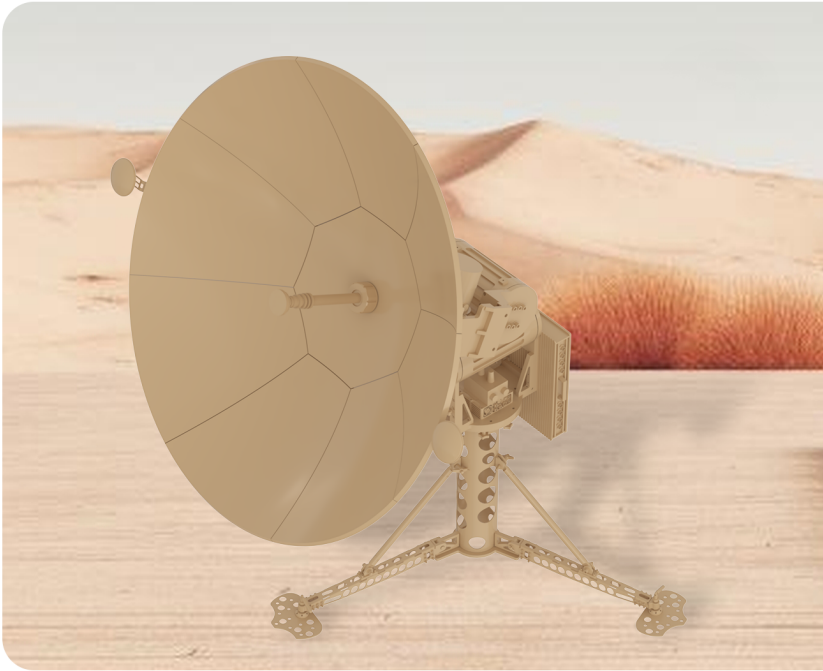




PXY-180-NG

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

The PXY-180 NG is an ultra-mobile, small-footprint X/Y pedestal engineered for rapid high-speed connectivity across LEO, MEO, GEO, and HEO satellite regimes. Fully compliant with MIL-STD-810 and MIL-STD-461, the system packs into compact transit cases for effortless tactical deployment and achieves a complete tool-free setup in less than 30 minutes.

Mission Agility & Target Acquisition

Designed for maximum operational flexibility, the terminal supports standby, manual, pointing, program, auto, and memory tracking modes. It autonomously acquires targets using modem SNR, beacon, or carrier signals without external equipment. Real-time spectrum monitoring is available through an intuitive web GUI or an ACU-connected tablet, while dual GPS receivers enable rapid multi-orbit acquisition.

Precision Tracking & Modular Architecture

A high-performance servo mechanism delivers smooth, zero-keyhole tracking during high-speed satellite passes. The modular architecture allows a single operator to quickly replace sub-components and switch frequency bands in the field. A single power source feeds all critical internal modules, while tool-less quick-release captive bolts simplify hardware replacement and firmware updates.

Key Features

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



GENERAL SPECIFICATIONS

Reflector Diameter
Reflector Type
Antenna Concept
Power Supply
Power Consumption

PXY-180-NG

1.8 m Carbon - Fiber
Dielectric Back Feed Assembly
Segmented
100-240 VAC/50-60 Hz
< 2kW

RF CHARACTERISTIC

Frequency (GHz) Tx
Frequency (GHz) Rx
Antenna Gain (±0.2 dBi) Tx
Antenna Gain (±0.2 dBi) Rx
VSWR
Polarization
Axial Ratio (dB)
Antenna Pattern Compliancy

X-Band

790 - 8.40 GHz
7.25 - 7.75 GHz
≥ 41.3 dBi(@) 8.15 Ghz
≥ 40.5 dBi(@) 7.5 Ghz
≤1.5:1
Circular
≤1.2
ITU-R S.580-6.

Ku-Band

13.75 - 14.50 GHz
10.70 - 12.75 GHz
≥ 46.2 dBi(@) 14.25 Ghz
≥ 45.2 dBi(@) 12.5Ghz
≤1.5:1
Linear
≥35 dB (CPI)
ITU-R S.580-6.

Ka-Band

27.5 - 31.0
17.7 - 21.2
≥ 51.5 dBi(@) 29.25 Ghz
≥ 48.0 dBi(@)19.45Ghz
≤1.5:1
Circular
≤ 1.2 (Rx) / ≤1.0 (Tx)
ITU-R S.580-6.

MECHANICAL SPECIFICATIONS

Antenna Motion Range
Antenna Drive Rate
Motor
Weight

X Axis

± 90° ± 90°
0.1° - 6° /s
DC Brushless Servo with Brakes
≤ 200 Kg without BUC and transport cases

Y Axis

± 90°

Polarization

± 90°

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational
Temperature Range Survival
Wind Speed Operational
Wind Speed Survival
Protection Grade
Solar Radiation

PXY-180-NG

-30°C - +55°C
-40°C - +70°C
gusting 72 km/h with anchors
gusting 120 km/h with anchors
IP65
1135W/m2

Specifications are subject to change.

