



Size: 0.80m

PMA-80

Fully Automated Deployment in a Backpack

The PMA-80 AUTO Manpack is a fully automated, ultra-compact terminal designed for immediate use. Stowed in a single, transport-ready backpack, it can be unpacked and automatically acquire a satellite link within minutes, requiring no technical expertise from the operator.

Autonomous Pointing with Professional Performance

The system features integrated GPS, inertial sensors, and a high-performance beacon receiver for fully autonomous satellite acquisition and tracking. This automation, combined with its advanced feed design, guarantees professional-grade RF performance with high gain and low side lobes across multiple frequency bands.

The Autonomous Link for Critical Field Missions

Engineered for reliability on rough terrain, the PMA-80 AUTO is the essential autonomous communication link for military operatives, emergency first responders, and broadcast teams in remote locations. It delivers secure, high-quality connectivity where and when it is needed most.

Key Features

- X, Ku, and Ka Bands are available
- LEO/MEO Overhead Tracking Option
- Carbon-fiber reflector with an accuracy of R.M.S 0.25mm
- 3-Axes simultaneous motorisation
- Optional 4G/5G/ LTE supported modem for load balancing and bonding solutions
- Built-in Wi-Fi and a Web-Based User Interface
- Supports Wide Range BUCs (from 6W to 40W)
- Powered by Mains or Battery
- Supports OpenAmip & Encryption Option



LEO/MEO OVERHEAD TRACKING OPT.

GPS
Third Axis Rotation Range
Accuracy Heading
Accuracy Speed
Accuracy Positioning
Accuracy Timing

PMA-80

Dual GPS Module
±7°
≤0.2°/m
≤0.03m/s
2m CEP 2cm+1ppm RTK
20ns

RF CHARACTERISTIC

Frequency (GHz) Tx
Frequency (GHz) Rx
Antenna Gain (±0.2 dBi) Tx
Antenna Gain (±0.2 dBi) Rx
Tx/ Rx Isolation (dB)
Rx / Tx Isolation (dB)
CPI (On Axis, linear)
Polarization
Waveguide Interface Tx
Waveguide Interface Rx
VSWR Tx
VSWR Rx

X-Band

79~8.4 GHz
7.25~7.75 GHz
34.6
34.0
85
40
Tx: 1.0/Rx: 1.5 (Axial Ratio)
RHCP / LHCP (2 Ports)
WR-112
WR-112
1.30:1
1.50:1

Ku-Band

13.75~14.50 GHz
10.70~12.75 GHz
39.2
37.2
85
40
35
Linear H/V (2 Ports)
WR-75
WR-75
1.30:1
1.50:1

Ka-Band

27.50~31.00 GHz
17.70~21.20 GHz
45.9
42.4
85
40
Tx: 1.0/Rx: 1.5 (Axial Ratio)
RHCP / LHCP (2 Ports)
WR-28
WR-42
1.30:1
1.50:1

MECHANICAL/ POWER SPEC.

Deploy Speed
Antenna Travels
Peaking Speed
Weight
Backpack Size
Antenna Type
DC Input
DC Output
Battery Details (Optional)
Battery Working Temperature (Optional)
PMS Weight/ Size (Optional)

Azimuth

10°/S (Variable)
± 200°
7°/S
12.5 Kg
540x400x310mm
Circular symmetric reflector with center feed
10-72 VDC @ 15 ADC (max) (External: Hand generator, Solar, AC and Vehicle)
24VDC @ 8 ADC
PT18650 (BB2590 Option) 18V 5.5Ah 99Wh (17V~18.5V) W: ≤0.6Kg
-20°C~ +55°C(-30°C~ +55°C Option)
2.2 Kg (Include 2 sets PT18650) /150°110°80mm

Elevation

10°/S (Variable)
10°~90°
7°/S

Polarization

3°/S (Variable)
± 110° (Ku Model Only)

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational
Temperature Range Survival
Wind Speed Operational
Wind Speed Survival
Humidity (Relative)
Altitude Above Sea Level
Protection Grade

PMA-80

-30°C~+60°C
-40°C~+70°C
50km/h (With weight balance)
65km/h (With reinforcement weight)
0-98%
≤5000m
IP67

Specifications are subject to change.

