



Size:

0.60m

PMA-60

Ultra-Portable Design

The PMA-60 is the most compact antenna in the PALS Man-Pack series, designed for true single-person portability. It fits entirely within one IATA-compliant backpack and deploys in under two minutes without any tools or specialized training, enabling instant live connectivity from any location.

Precision Tracking

Supporting manual, auto, and one-button satellite acquisition, the PMA-60 locks onto targets in minutes. Integrated GPS, position detection, and a servo-driven polarization adjustment ensure precise alignment. The high-performance satellite receiving system guarantees reliable links from any terrain.

Rugged Performance

Engineered for hills, mountains, and uneven ground, the PMA-60 operates effectively on inclines up to 15° without requiring a level surface. Its advanced feed structure delivers high gain, low sidelobes, and exceptional RF performance across multiple bands, making it ideal for broadcasting, military, and emergency communications.

Key Features

- Available in X, Ku, and Ka Bands
- LEO/MEO Overhead Tracking Option
- High EIRP
- Carbon-fiber reflector with an accuracy of R.M.S 0.25mm
- 3-Axes simultaneous motorisation
- Supports Wide Range BUCs (from 6W to 40W)
- Supports OpenAmip
- Integrated / External modem (iDirect, Comtech, Newtech, Hughes)
- Powered by Mains or Battery
- Encryption Option
- Optional 4G /5G / LTE supported modem for load balancing and bonding solutions



GENERAL SPECIFICATIONS

Reflector Diameter	0.6m
Antenna Type	Circular symmetric reflector with center feed

PMA-60

LEO/MEO OVERHEAD TRACKING OP.

Accuracy	±0.2°/m
GPS	Dual GPS Module
Third Axis Rotation Range	±7°

Heading

Positioning

Speed

Timing

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

RF CHARACTERISTIC

Frequency (GHz) Tx	7.9 ~ 8.4
Frequency (GHz) Rx	7.25 ~ 7.75
Antenna Gain (±0.2 dBi) Tx	32.3
Antenna Gain (±0.2 dBi) Rx	31.5
Tx/ Rx Isolation (dB)	85
Rx / Tx Isolation (dB)	40
CPI (On Axis, linear) Tx	1.0/Rx: 1.5 (Axial Ratio) 35
Polarization	RHCP/LHCP (2 Ports)
Waveguide Interface Tx	WR-112
Waveguide Interface Rx	WR-112
VSWR Tx	1.30:1
VSWR Rx	1.50:1

X-Band

Ku-Band

Ka-Band

Frequency (GHz) Tx	7.9 ~ 8.4	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 (±0.2 dBi) Tx	32.3	37.1	43.6
Antenna Gain (±0.2 dBi) Rx	31.5	35.6	40.2
Tx/ Rx Isolation (dB)	85	85	85
Rx / Tx Isolation (dB)	40	40	40
CPI (On Axis, linear) Tx	1.0/Rx: 1.5 (Axial Ratio) 35	-	1.0/Rx: 1.5 (Axial Ratio)
Polarization	RHCP/LHCP (2 Ports)	Linear H/V (2 Ports)	RHCP/LHCP (2 Ports)
Waveguide Interface Tx	WR-112	WR-75	WR-28
Waveguide Interface Rx	WR-112	WR-75	WR-42
VSWR Tx	1.30:1	1.30:1	1.30:1
VSWR Rx	1.50:1	1.50:1	1.50:1

MECHANICAL/ POWER SPEC.

Deploy Speed	10°/S (Variable)
3°/S (Variable)	± 200°
Peaking Speed	7°/S
Weight	10.5 Kg
Backpack Size	490x400x310mm
DC Input	10~72 VDC @ 15 ADC (max) (External: Hand generator, Solar, AC and Vehicle)
DC Output	24VDC @ 8 ADC
Battery Details (Optional)	PT18650 (BB2590 Option) 18V 5.5Ah 99Wh (17V~18.5V) W: ≤0.6Kg
Battery Working Temperature (Optional)	-20°C~ +55°C(-30°C~ +55°C Option)
PMS Weight / Size (Optional)	2.2 Kg (Include 2 sets PT18650) /150*110*80mm

Azimuth

Elevation

Polarization

Deploy Speed	10°/S (Variable)	10°/S (Variable)	3°/S (Variable)
3°/S (Variable)	± 200°	10°~90°	± 110° (Ku Model Only)
Peaking Speed	7°/S	7°/S	
Weight	10.5 Kg		
Backpack Size	490x400x310mm		
DC Input	10~72 VDC @ 15 ADC (max) (External: Hand generator, Solar, AC and Vehicle)		
DC Output	24VDC @ 8 ADC		
Battery Details (Optional)	PT18650 (BB2590 Option) 18V 5.5Ah 99Wh (17V~18.5V) W: ≤0.6Kg		
Battery Working Temperature (Optional)	-20°C~ +55°C(-30°C~ +55°C Option)		
PMS Weight / Size (Optional)	2.2 Kg (Include 2 sets PT18650) /150*110*80mm		

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational	-30°C~+60°C
Temperature Range Survival	-40°C~+70°C
Wind Speed Operational (With weight balance)	50km/h
Wind Speed Survival	65km/h

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Specifications are subject to change.

