



PMA-100

The Man-Pack type PMA-100 has a 1.0m reflector size and supports manual, auto, and one-button satellite locking, enabling quick setup in minutes. Its advanced feed structure ensures high gain, low side lobes, and excellent RF performance. Available in various frequency bands, the PMA-100 is equipped with GPS, position detection, polarization adjustment, and a servo drive integrated with a high-performance satellite receiving system.

The PMA-100 is designed for easy transport in an IATA-compliant backpack, making it portable for a single user. It can be deployed within minutes and is ready for live operation instantly—no additional tools or training are required.

Ideal for broadcasting, corporate networks, military, and emergency communications, the PMA-100 is versatile and suitable for deployment in challenging locations, including hills and mountains. The antenna operates without leveling and can function on inclines up to 15°.

Key Features

- Available in Ku, Ka and X Band
- LEO/MEO Overhead Tracking Option
- Lightweight, high-strength carbon-fiber reflector with an accuracy of R.M.S 0.25mm
- 3-Axes simultaneous motorisation
- One-Button Operation
- Integrated GPS, Compass, Beacon / DVB Receiver
- Built-in Wi-Fi and a Web-Based User Interface
- Supports Wide Range BUCs (from 6W to 40W)
- Powered by Mains or Battery
- Integrated / External modem (iDirect, Comtech, Newtech, Hughes)
- Encryption Option
- Supports OpenAmip



LEO / MEO OVERHEAD TRACKING OPTION

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

RF CHARACTERISTIC

		X-Band	Ku-Band	Ka-Band
Frequency (GHz)	Tx	7.9~8.4 GHz	13.75~14.50 GHz	27.50~31.00 GHz
	Rx	7.25~7.75 GHz	10.70~12.75 GHz	17.70~21.20 GHz
Antenna Gain (±0.2 dBi)	Tx	36.4	41.4	48.0
	Rx	35.7	39.3	44.5
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		Tx: 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
	Rx	WR-112	WR-75	WR-42
VSWR	Tx	1.30:1	1.30:1	1.30:1
	Rx	1.50:1	1.50:1	1.50:1

MECHANICAL / POWER SPECIFICATIONS

	Azimuth	Elevation	Polarization
Deploy Speed	10°/S (Variable)	10°/S (Variable)	3°/S (Variable)
Antenna Travels	± 200°	10°~90°	± 110° (Ku Model Only)
Peaking Speed	7°/S	7°/S	
Weight	16.5 Kg		
Backpack Size	680x450x350mm		
Reflector Diameter	1.0m		
Antenna Type	Circular symmetric reflector with center feed		
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	Operational	-30°C~+60°C
	Survival	-40°C~+70°C
Wind Speed	Operational	50km/h (With weight balance)
	Gusts	65km/h (With reinforcement weight)
Humidity (Relative)	0-98%	
Altitude Above Sea Level	≤5000m	
Protection Grade	IP67	

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