



PMA-100

The PMA-100 is a lightweight, manual man-pack satellite terminal featuring a 1.0m high-performance reflector for quick, hassle-free setup in just minutes. Its advanced feed structure delivers exceptional RF performance with high gain and low side lobes.

When paired with the P-SM-1200 modem system and PALS Point-Sat, the PMA-100 becomes a complete, turnkey solution for broadcasting, enterprise networks, defense, and emergency communications.

The PALS Point-Sat system ensures precision every time. With real-time satellite pointing, beacon signal and DVB-S signature detection, and clear visual feedback on alignment, operators can achieve fast, accurate satellite lock with zero guesswork..

At the core, the P-SM-1200 integrates seamlessly with industry-leading modems including iDirect, Hughes, NewTec, Comtech, Gilat, and Viasat, meeting the toughest demands of both commercial and defense-grade operations. Built rugged for reliability, it guarantees secure, mission-critical communications even in the harshest environments.

Key Features

- Available in X, Ku, and Ka Bands
- Integrated Sat-Finder and Modem Box
- Lightweight, high-strength carbon-fiber reflector with an accuracy of R.M.S 0.25mm
- Optional 4G / 5G / LTE supported modem for load balancing and bonding solutions
- Supports Wide Range BUCs (from 6W to 40W)
- Powered by Mains or Battery
- Integrated / External modem (iDirect, Comtech, Newtech, Hughes)
- Encryption Option
- Supports OpenAmip

GENERAL SPECIFICATIONS

Reflector Diameter	1.0m
Reflector Type	Exchangeable 7 Segments
Modem Interface	Ethernet, OpenAMIP
Modem Support	iDirect, Newtec, Gilat, Datum, Comtech, THISS etc.
Power Input (Modem Box)	Battery 24V DC, AC 100- 230 V

RF CHARACTERISTICS

KU-BAND

KA-BAND

		KU-BAND	KA-BAND
Frequency (GHz)	Tx	13.75 - 14.50	27.50 - 31.00
	Rx	10.70 - 12.75	17.70 - 20.20
Gain (dBi)	Tx	41.50	47.60
	Rx	40.20	44.30
Tx / Rx Isolation (dB)		85	85
Rx / Tx Isolation (dB)		30	30
Cross Polarization (dB)		35	1.5 (axial ratio)
1st Sidelobe (dB)		<-14	<-14

MECHANICAL SPECIFICATIONS

Motion Range	AZ: 0 ~360°	EL: 0 ~ 90°	POL: - 120 ~ +120°
Backpack Size	710x500x450mm	Weight ≤ 4.5kg	
Weight	Antenna ≤ 13kg	Modem Box: ≤ 3kg	Pointsat: ≤0.5kg

ENVIRONMENTAL SPECIFICATIONS

Operation Temperature	-40 ~ +60°C		
Protection	IP65		
Operational Wind Load	≤50 km/h (weight balanced)	Gust: ≤65 km/h	
Humidity	0 to 100% @ 40°C		

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