STANDARD MIL-STD 188-164A

STANDARD MIL-STD 810

Size: 0.85m

PMAR-85B

High-Speed Mobile Terminal

The PMAR-85B is a rugged, MIL-STD compliant terminal engineered for both military and commercial use in extreme environments. Its advanced antenna feed ensures seamless operation across GEO, MEO, LEO, and HEO orbits, providing a resilient and cost-effective communication.

Superior Precision

Utilizing a proprietary closed-loop beacon processing system, the PMAR-85B delivers near-zero pointing error for maximum link stability. Its 4 axes mount eliminates the keyhole effect, ensuring uninterrupted connectivity and fluid movement even when the satellite is directly overhead or signal conditions are weak.

Built for Critical Marine Missions

Downtime is minimized through an innovative gyro-lock mode that enables instantaneous re-connection after obstructions. Designed for longevity, the unit features sealed brushless motors and a balanced inertial system to reduce wear, lowering maintenance needs and power consumption to just a few watts above BUC requirements.

Key Features

- Available in X, Ku and Ka Band
- GEO, MEO, LEO, HEO Compatible
- Optimized Ka-Band Throughput
- High-Precision Stabilization
- Integrated MEMS Sensors Technology
- RF Path Optimization
- Consistently high data rate
- Supports OpenAMIP
- Rapid Acquisition
- Optional 4G/ 5G/LTE supported modem for load balancing and bonding solutions

PALS® | Communications & Technology

Connect on Board!

TECHNICAL SPECIFICATIONS / PMAR-85B

Scan the QR code for more information.

GENERAL SPECIFICATIONS	PMAR-85B
Reflector Diameter	0.85m
Stabilization Platform	3-axis (plus Auto Skew)
Tracking Mode	Carrier Tracking, SNR Direct Tracking
Tracking Accuracy	0.2° RMS
Modem Interface	Ethernet, OpenAMIP
Modem Support	iDirect, Newtec, Gilat, THISS, Hughes, Comtech
Power Input	85V~264V AC / DC, 18-36V
BUC	3W, 6W, 8W, 16W, 20W (Ka)

RF CHARACTERISTIC	Ku-Band	Ka-Band
Frequency (GHz) Tx	13.75 ~ 14.5	29 ~ 30
Frequency (GHz) Rx	10.7 ~ 12.75	17.7 ~ 20.2
Gain (dBi) Tx	40.0 @ 14.25	46.5 @ 29.25
Gain (dBi) Rx	39.0 @ 11.75	43.5 @ 19.45
EIRP (dBW)	47 (w 6W BUC)	51.3 (w 4W BUC)
G/T (dB/K)	17.6	17.8
Polarization	Linear	Circular
Cross-Pol Isolation (dB)	>30	

MECHANICAL/ POWER SPEC.	Azimuth	Elevation	Roll
Motion Range	Unlimited	-10° ~ 110°	±30°
Skew Control	Automatic, with Pre-set Offset Supported		
Supported Orbit	GEO, MEO, LEO, HEO		
Sensors	IMU		
Dimensions (DxH)	110cm x 109cm		
Weight	76kg		

ENVIRONMENTAL SPECIFICATIONS	PMAR-85B
Temperature Range Operational	-20°C ~ 55°C
Temperature Range Survival	-55 ~ +70°C
Wind Speed Operational	80 kn
Wind Speed Survival	110 kn
Protection Grade	IP65

Specifications are subject to change.