



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.



STANDARD
MIL-STD
188-164A

STANDARD
MIL-STD
810

Size:

0.85m

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





GENERAL SPECIFICATIONS

Reflector Diameter
Stabilization Platform
Tracking Mode
Tracking Accuracy
Modem Interface
Modem Support
Power Input
BUC

PMAR-85B

0.85m
3-axis (plus Auto Skew)
Carrier Tracking, SNR Direct Tracking
0.2° RMS
Ethernet, OpenAMIP
iDirect, Newtec, Gilat, THISS, Hughes, Comtech
85V~264V AC / DC, 18~36V
3W, 6W, 8W, 16W, 20W (Ka)

RF CHARACTERISTIC

Frequency (GHz) Tx
Frequency (GHz) Rx
Gain (dBi) Tx
Gain (dBi) Rx
EIRP
G/T (dB/K)
Polarization
Cross-Pol Isolation (dB)

Ku-Band

13.75 ~ 14.5
10.7 ~ 12.75
40.0 @ 14.25
39.0 @ 11.75
47 (w 6W BUC)
17.6
Linear
>30

Ka-Band

29 ~ 30
17.7 ~ 20.2
46.5 @ 29.25
43.5 @ 19.45
51.3 (w 4W BUC)
17.8
Circular

MECHANICAL/ POWER SPEC.

Motion Range
Skew Control
Supported Orbit
INU & Gyros
Dimensions (DxH)
Weight

Azimuth

Unlimited
Automatic, with Pre-set Offset Supported
GEO, MEO, LEO, HEO
Embedded
110cm x 109cm
76kg

Elevation

-10° ~ 110°

Roll

±30°

ENVIRONMENTAL SPECIFICATIONS

Temperature Range Operational
Temperature Range Survival
Wind Speed Operational
Wind Speed Survival
Protection Grade

PMAR-85B

-20°C ~ 55°C
-55 ~ +70°C
80 kn
110 kn
IP65

Specifications are subject to change.

