



## PMAR-60

The PMAR-60 is specially designed for maritime applications and features a 3-axis stabilization structure. It includes high-precision angle sensors, magnetoresistive sensors, a gyro sensor, and a GPS antenna. These components enable real-time monitoring and adjustments, ensuring the antenna automatically searches for and tracks satellites, maintaining communication even in challenging sea conditions.

The PMAR-60 supports both Ku and Ka band operations with high-precision satellite tracking. Utilizing an advanced conical scan algorithm, it accurately locks onto the satellite with a pointing precision of 0.2° RMS. The antenna offers fast multi-satellite switching, allowing for quick adjustments and seamless transitions between target satellites.

With digital satellite acquisition technology, the PMAR-60 accurately identifies the target satellite by analyzing the C/N value of the desired satellite carrier signal.

## Key Features

- Available in Ku and Ka Bands
- Highly reliable Direct Drive System
- Optional 4G / 5G / LTE supported modem for load balancing and bonding solutions
- Exceptional tracking accuracy
- Rapid Blockage Recovery Time
- 3-Axes Stability System
- 4-Axes Tracking System
- Consistently high data rate
- Broad modem compatibility
- Easy installation and retrofit



**GENERAL SPECIFICATIONS**

Reflector Diameter	0.65m
Stabilization Platform	3-Axis for stability, 4-axis for tracking
Antenna Form	Circle against symmetrical reflector and cap feed
Antenna Material	Carbon-fiber
Power Input	DC18-36V
Power Consumption	≤85W (Ku 16W BUC) ≤90W (Ka 10W BUC)

**RF CHARACTERISTICS**

		X-Band	Ku-Band	Ka-Band
Frequency (GHz)	Tx	7.9 – 8.4	13.75 - 14.50	29.0- 30.00
	Rx	7.25 – 7.75	10.70 - 12.75	18.7 - 20.20
Antenna Gain ( dBi)	Tx	32.1+20lg(f/8.15)	38.1+20lg(f/14.25)	44.9+20lg(f/30)
	Rx	31.3 +20lg(f/7.5)	37.1+20lg(f/12.75)	41.5+20lg(f/19.6)
Tx / Rx Isolation (dB)		85	85	85
Rx / Tx Isolation (dB)		40	40	40
Cross Polarization (dB)			35 (Axis)	
G/T			13.3	15.1
EIRP (dBw)			48 (16W BUC)	54.5(10W BUC)
Antenna Pattern Compliancy		ITU-RS-580 and ITU-RS-465-6		
Pointing Accuracy		≤0.2° (R.M.S)		
Initial Acquisition Time		≤2min		
Blockage Recovery Time		≤5s (Cover for 5min)		

**MECHANICAL / POWER SPECIFICATIONS**

	Azimuth	Elevation	Pol	Roll
Motion Range	360° continuous	-10° - 100°	±110° (Ku), 90° (Ka)	-30°-30°
Antenna Revolution	100°/S	100°/S		100°/S
Acceleration	200°/S <sup>2</sup>	200°/S <sup>2</sup>		200°/S <sup>2</sup>
Weight	≤17Kg(including antenna system&Transceiver,excluding Radome)			
Antenna Profile Dimensions	≤φ725*H675mm (D*H)			
Positining Mode	GPS			

**ENVIRONMENTAL SPECIFICATION**

Operation Temperature	-40 ~ +55°C
Survival Temperature	-55 ~ +70°C
Protection	IP65
Operational Wind Load	80 Knot
Survival Wind Load	110 Knot
Humidity	0 to 100%

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