



PMAR-100N

The PMAR-100N is specifically designed for maritime applications, featuring a 3-axes stabilization structure. It includes high-precision angle sensors, magnetic resistance 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-100N supports both Ku and Ka band operations with high-precision satellite tracking. Using an advanced conical scan algorithm, it accurately locks onto the satellite with a pointing precision of 0.2° RMS. The antenna provides fast multi-satellite switching, allowing quick adjustments and seamless transitions between target satellites.

With digital finding technology, the PMAR-100N accurately identifies the target satellite by analyzing the C/N value of the desired satellite carrier signal.

Key Features

- Available in Ku and Ka Band
- Highly reliable Direct Drive System
- 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	1.0m
Stabilization Platform	3-Axis (Plus Auto Skew)
Tracking Mode	Carrier Tracking, SNR Direct Tracking
Modem Interface	Ethernet, OpenAMIP
Modem Support	iDirect, Newtec, Gilat, Datum, Comtech, etc.
Power Input	85V - 264V AC

RF CHARACTERISTIC

		Ku-Band	Ka-Band
Frequency (GHz)	Tx	13.75 - 14.50	27.5 - 31.00
	Rx	10.70 - 12.75	17.7 - 21.20
Antenna Gain (±0.2 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)
VSWR	Tx	1.30:1	1.30:1
	Rx	1.50:1	1.50:1
1st Side Lobe (dB)		≤-16	≤-16
Pointing Accuracy		≤0.2° (R.M.S)	
Initial Acquisition Time		≤2min	
Blockage Recovery Time		≤5s (blockage 20min)	

MECHANICAL / POWER SPECIFICATIONS

	Azimuth	Elevation	Roll
Antenna Speed	90°/S	90°/S	90°/S
Antenna Travels	360° continuous	-20°~+120°	± 35°
Acceleration	200°/S ²	200°/S ²	200°/S ²
Weight	<95 Kg		
Radom Size	D: 1170mm H: 1300mm		
System Power Supply	100-230VAC 50-60Hz		

ENVIRONMENTAL SPECIFICATION

Operation Temperature	-30 ~ +55°C
Survival Temperature	-55 ~ +85°C
Protection	IP67
Operational Wind Load	80 Knot
Survival Wind Load	110 Knot
Humidity	0 to 100%

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