



## PMAR-45N

PMAR-45N is specially designed for the ship, adopts a 3-axis stability structure, built-in high precision angle sensors, magnetic resistance sensors and gyro sensor, and the GPS antenna, which can monitor the external changes of the outside world in real time, and make sure that the antenna is adjusted in real time, ensuring that the antenna will automatically search and track the satellite, and still keep the communication open even in the challenging sea conditions.

The PMAR-45N supports operation at either Ku or Ka with high precision satellite tracking, using the advanced conical scan algorithm, can control the antenna accurately locking the satellite direction, pointing to the precision control in the 0.2° RMS. Multi-satellite switching speed is fast, receiving the target satellite directive, can adjust the antenna Angle quickly, and switch the target satellite in a circle.

Using digital finding technology, the target satellite can be accurately identified by the C/N value of the demand satellite carrier signal.

## Key Features

- High reliable Direct Drive System
- Support Ku and Ka bands
- High Tracking Accuracy
- Fast Blokage Recovery Time
- Three-Axis Stability
- Four-Axis Tracking
- Reliable High Data Rate
- Compatible With Most Modems
- Easy to Install and Refit



#### GENERAL SPECIFICATIONS

Reflector Diameter	0.45m
Stabilization Platform	3-Axis for stability, 4-Axis for tracking
Tracking Mode	Carrier Tracking, SNR Direct Tracking
Modem Interface	Ethernet, OpenAMIP
Modem Support	iDirect, Newtec, Gilat, Datum, Comtech, etc.
Power Input	DC 18-36V
Power Consumption	≤95W (Ku 16W BUC) ≤100W (Ka 10W BUC)

#### 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	34.90	41.00
	Rx	33.80	37.70
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	100°/S	100°/S	90°/S
Antenna Travels	360° continuous	-20°~+120°	± 35°
Acceleration	200°/S <sup>2</sup>	200°/S <sup>2</sup>	200°/S <sup>2</sup>
Radom Size	D: 558mm H: 520mm		
Weight	≤10.6Kg with 10W Ka Band Transceiver, Modem and Radom ≤11.9Kg with 16W Ku Band Transceiver, Modem and Radom		

#### 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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