



PMAR-60N

The PMAR-60N is specially designed for maritime applications and features a 3-axis 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-60N 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 finding technology, the PMAR-60N accurately identifies the target satellite by analyzing the C/N value of the desired satellite carrier signal.

Key Features

- Available in X, 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 | 0.6m |
| 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

| | | X-Band | Ku-Band | Ka-Band |
|--------------------------|----|----------------------|---------------|-------------------|
| Frequency (GHz) | Tx | 7.9 - 8.4 | 13.75 - 14.50 | 27.5 - 31.00 |
| | Rx | 7.25 - 7.75 | 10.70 - 12.75 | 17.7 - 21.20 |
| Antenna Gain (±0.2 dBi) | Tx | 32.1+20lg(f/8.15) | 37.30 | 43.30 |
| | Rx | 31.3 +20lg(f/7.5) | 35.20 | 39.80 |
| Tx / Rx Isolation (dB) | | 85 | 85 | 85 |
| Rx / Tx Isolation (dB) | | 40 | 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 | ≤-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 | <40 Kg | | |
| Radom Size | D: 800mm H: 850mm | | |
| 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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