

SPECIFICATION

Part No.: OD012

Product Name: Multi-Band Omni-Directional Marine Outdoor Antenna.

Works with GSM / CDMA / PCS / DCS / UMTS/ WCDMA / LTE

Features: Excellent Radiation Patterns
Lightweight
All Weather Operation
Installed for Vertical Operation
RoHS Compliant

Photo:



REVISION STATUS:

| Version | Date | Page | Revision Description | Prepared | Approved |
|---------|--------------|------|----------------------|-------------------------|-------------|
| 01 | Mar 4th 2011 | All | New Product Release | Airgoon Products Groups | C. Clements |
| 02 | Apr 4th 2011 | All | Return Loss Added | Airgoon Products Groups | C. Clements |
| 03 | May 4th 2011 | All | Housing Modification | Airgoon Products Groups | C. Clements |

1.0 Introduction:

The **OD012 Multi-Band Marine Antenna** is professionally designed with the highest industrial quality. The antenna base is aluminum and resists rust. The products have good water resistance. Great care has been taken in the manufacture and assembly of the internal copper elements so they can bear a high input power.

2.0 Antenna Performance:

| | |
|----------------------|-------------------------------------|
| Frequency Band | 700 MHz - 2500 MHz |
| Bandwidth | 96 MHz. (Cellular) / 140 MHz. (PCS) |
| Gain | 12 dBi |
| Impedance | 50 Ohm |
| Polarization | Vertical |
| Max Power Handling | 50W |
| VSWR | 1.5:1 (Cellular) / 2.0:1 (PCS) |
| Vertical Beamwidth | 15° |
| Horizontal Beamwidth | 360° |

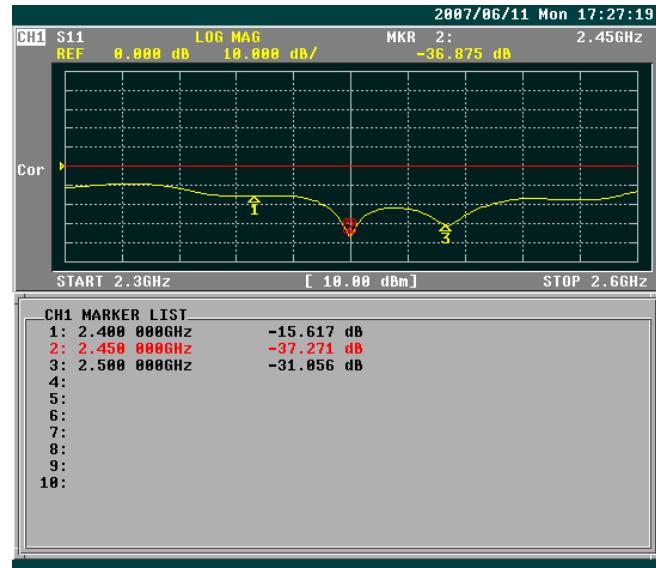
3.0 Mechanical Specifications:

| | |
|---------------------------------|------------------------------|
| Connector | 1 x TNC Type Female |
| Connector Location | Bottom |
| Dimensions (L*W*D) | Length 450mm, Diameter 170mm |
| Radome Diameter | 56mm |
| Weight (& Mounting Bracket max) | 320g |
| Antenna Heart | Brass Brass stack |
| Radome Material | White Fiberglass |
| Mounting Options | U-Bolt(Stainless steel) |

4.0 Environmental Ratings:

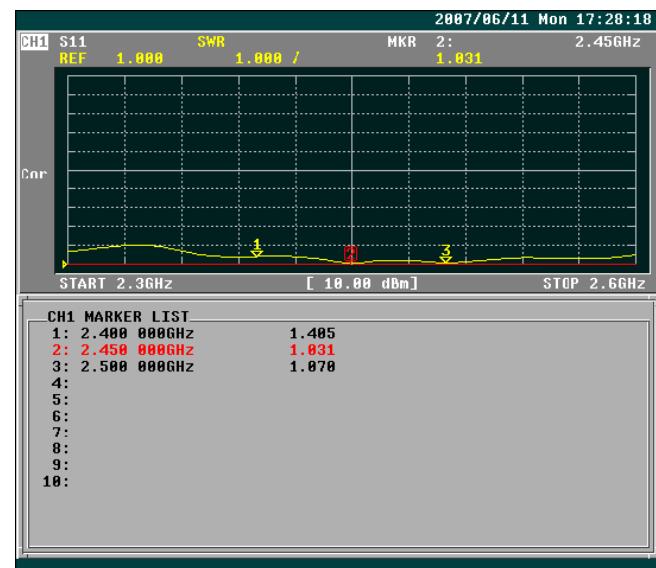
| | |
|-----------------------|----------------|
| Lightening Protection | None |
| Temperature | -40°C to +80°C |
| Wind Survival | >150mph |

5.0 Return Loss:



Test Data Taken at 2.45GHz.

6.0 VSWR:



Test Data Taken at 2.45GHz.

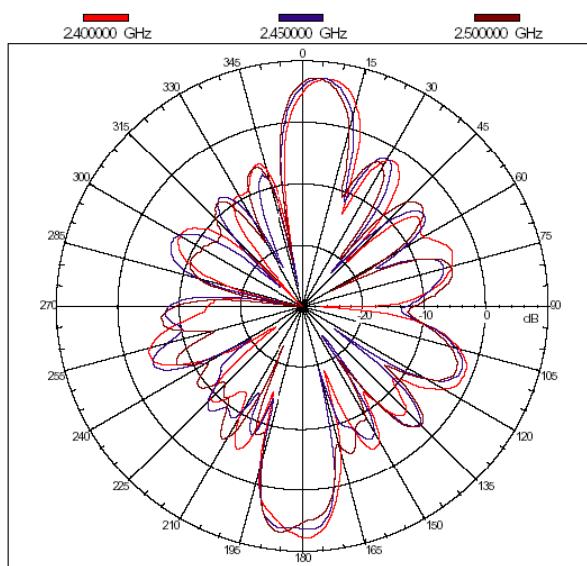
7.0 Smith Chart:



8.0 Radiation Patterns:

Vertical

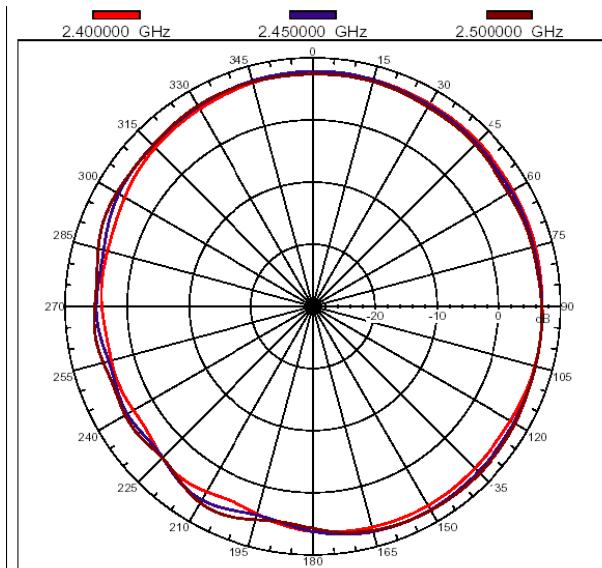
E-plane co-pol ----- 3-dB beam-with=15 Deg



Test Data Taken at 2.45GHz.

Horizontal

E-plane co-pol ----- 3-dB beam-with=360 Deg



Test Data Taken at 2.45GHz.