



ANMA2412
Marine 2.4 GHz WiFi Antenna

Installation Guide

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Package Contents

ANMA2412 2.4 GHz 12dBi
Omni-Directional Marine
Antenna



Note: An SS316TUBE coupler is not included and must be purchased separately, with or without a cable and connectors pre-installed through the coupler.

Additional Hardware Required

1. SS316TUBE coupler and coaxial antenna cable with N-male connector. N-style connectors will not fit through the hole in the SS316TUBE coupler. Smaller connectors on larger CA400FLEX cable are also extremely difficult to maneuver through the hole and up the tube. Therefore, we recommend one of the following options:
 - a. Purchase the cable, connectors and coupler separately. Insert the cable through the coupler tube and install the connector on the end of the cable. This is only recommended for those with experience terminating cables.
 - b. For ease of installation, the SS316TUBE can be purchased with a “pre-made” cable inserted through the hole in the SS316TUBE with connectors already attached at each end of the cable. Available cable types and lengths include:
 - i. CA195 cable (same size as RG58 cable, but lower signal loss characteristics) for distances up to 20 feet and with black or white jacket. An N-male connector is required at the antenna end. Choose the correct connector for the radio equipment connection at the other end.
 - ii. CA400FLEX cable is recommended for distances over 20' and for lower signal loss in runs less than 20'. This cable is much more flexible than the standard CA400 cable and has a white jacket. An N-male connector is required at the antenna end. Choose the correct connector for the radio equipment connection at the other end.
 - iii. An 8" pigtail is available with N-male and reverse polarity SMA (RP-SMA) connectors attached to a white CA195 cable. This allows the RP-SMA connector to slide through the SS316TUBE to the exterior of the coupler. A longer length of antenna cable can be run from this pigtail to the radio device.



2. Standard marine mounting bracket. Fixed, rail or deck mount type rails in either stainless steel or nylon are all common choices. The AN-MOUNT-02 Fixed Mount Bracket shown here is just one example.



Mounting Location

Line-of-sight is important for maximum signal propagation. Therefore the antenna should be located at the highest point possible.

A reasonable general separation rule is to place the antenna at least the length of the antenna from any other antenna. The antenna must be mounted vertically for proper operation.

Installation

1. Connect the N-male connector at the end of the coaxial cable to the antenna.
2. Screw the 1"-14 thread of the SS316TUBE coupler to the antenna base.
3. Mount the antenna to the marine mounting bracket.
4. Secure the mounting bracket.
5. Carefully route the cable to the WiFi transceiver, being careful to avoid damaging the cable by crushing or kinking.

Cleaning

Clean the antenna with a mild dishwashing liquid in lukewarm water or mild boat wash and wax. Avoid adhesive caulking, ammonia, cleaning solvents and paint solvents.

Warranty

This antenna is backed by a 5 year limited warranty.

Specifications

Frequency Range	2.4 – 2.485 GHz
Gain	12 dBi
Polarization	Linear Vertical
E-Plane (Vertical) Beamwidth	6.5°
Horizontal Beamwidth	360°
Input Impedance	50 Ω
VSWR	$\leq 1.5:1$
Lightning Protection	DC Grounded (reads shorted on continuity test)
Connector	N-Type Female
Radome Material	White Fiberglass (UV Resistant)
Base and Coupler Tubing Material	316 Grade Stainless Steel
Height	41.33 inches (105 cm)
Mount	Marine Standard 1" x 14 Thread