

Specification

- Part No.** : **OMB.868.B10F21**
- Description** : Barracuda 868MHz 10dBi
Omnidirectional Outdoor Antenna
- Features** : 868 MHz ISM Band Coverage
Omnidirectional Radiation Pattern
10dBi Peak Gain
Robust Design for Outdoor Environments
IP65 Waterproof
Connector: N Type Female
Length: 2240 mm
Weight: 1.16 Kg
Wall & Pole Mount Options
RoHS compliant



1. Introduction

The Barracuda OMB.868.B10F21 is a fiberglass omni-directional outdoor antenna, operating in 868 MHz ISM band. The antenna has an 10dBi high peak gain, providing a large coverage area for Low Power Radio (Sigfox, LPWA, LoRa) and mesh networks. Typical applications are in IoT, metering, industrial/environmental monitoring and remote asset monitoring.

The OMB.868 operates at 868MHz, one of the most widely used license free ISM bands, with a 10dBi peak gain. The omni-directional antenna uses an advanced collinear dipole design, meaning it radiates uniformly in the azimuth with a high gain, providing coverage over long distances, thus minimizing the amount of cells or nodes needed in a network.

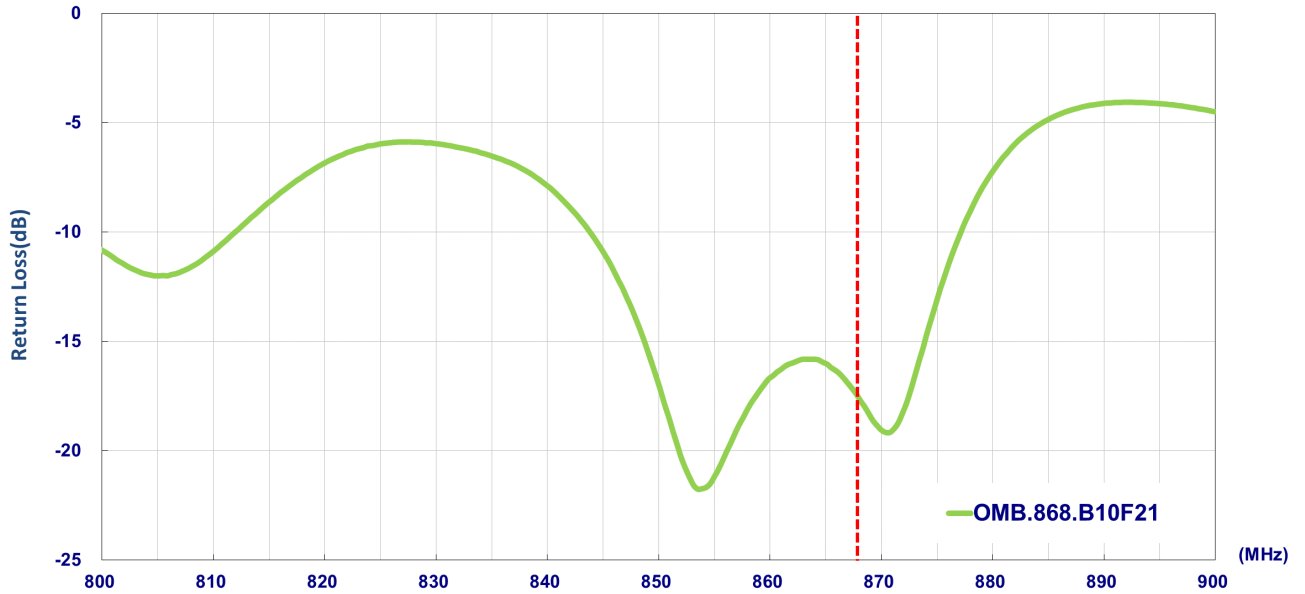
The UV resistant fiberglass housing enables the OMB antenna to be utilized in all kinds of harsh environments, making it more robust and safer than traditional whip antennas. It has been designed to withstand high wind load. The integrated aluminum mounting bracket is perfect for directly mounting the antenna onto a pole or a wall. The connector is industry standard N-type female. Connector can be customized subject to MOQ. Other frequencies and gains are available. Contact Taoglas regional sales office for more details.

2. Specification

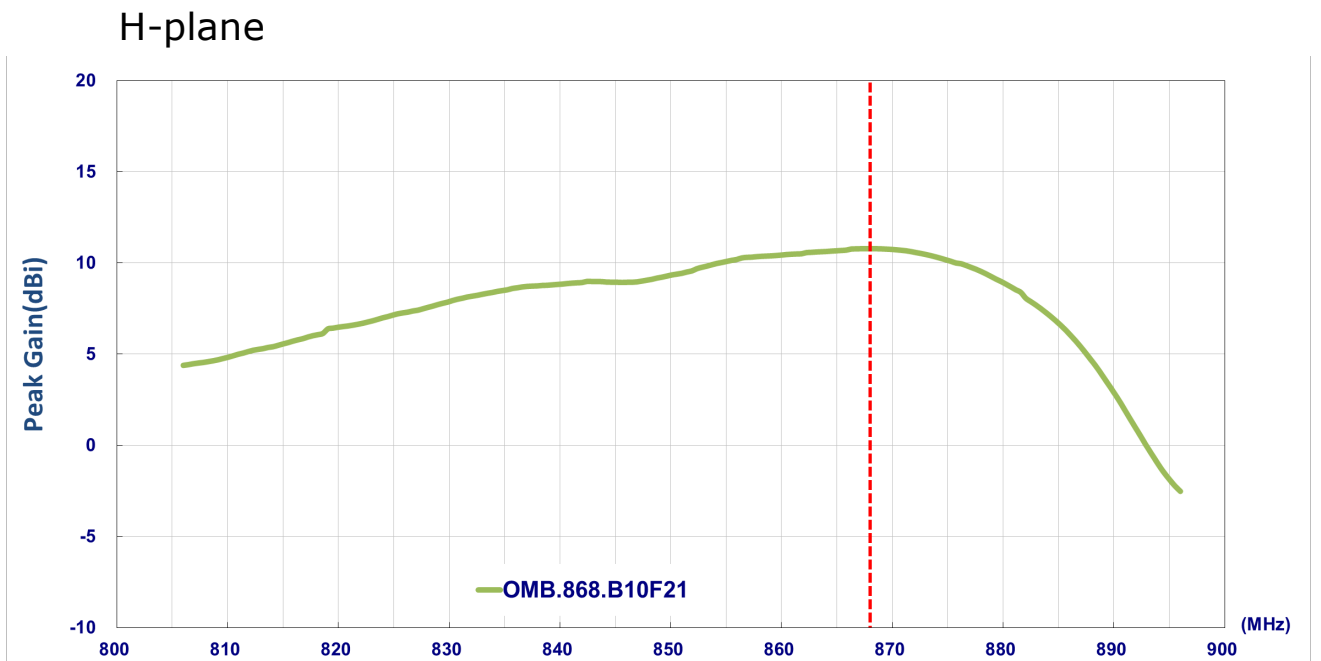
| ELECTRICAL | |
|-----------------------------|------------------------|
| Standard | ISM 868 |
| Band | 860-870 MHz |
| Antenna Type | Collinear Dipole Array |
| Peak Gain | 10 dBi |
| Polarization | Vertical |
| Impedance | 50 ohms |
| Max Input Power | 50 watts |
| VSWR | 1.5:1 |
| Radiation | Omni-Directional |
| Internal Material | Copper |
| Connector | N Type Female |
| MECHANICAL | |
| Length | 2240 mm |
| Bracket Dimension | 70 x 73mm |
| Antenna Weight | 1.16 Kg |
| Mounting Accessories Weight | 70g |
| Application | Indoor/Outdoor |
| Radome Material | White Fiberglass |
| Bracket Material | Aluminum |
| Mount Style | Pole Mount/Wall Mount |
| Mount Hardware Material | Stainless Steel |
| Wind Resistance | >150mph (>241km/h) |
| Waterproof | IP65 |
| ENVIRONMENTAL | |
| Storage Temperature | -40°C to +80°C |
| Operating Temperature | -40°C to +60°C |
| Operating Humidity | 10%~90% non-condensing |
| Storage Humidity | 5%~90% non-condensing |

3. Antenna Characteristics

3.1 Return Loss



3.2 Peak Gain



4. Antenna Radiation Pattern

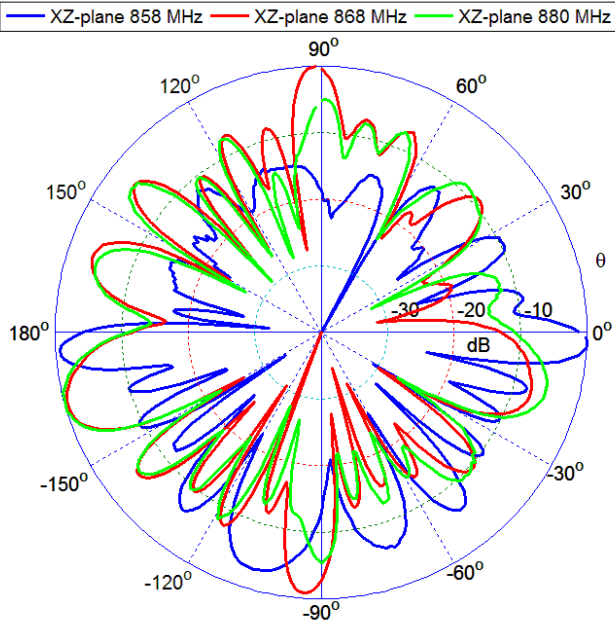
4.1 Measurement Setup

Horizontal Pattern – H plane

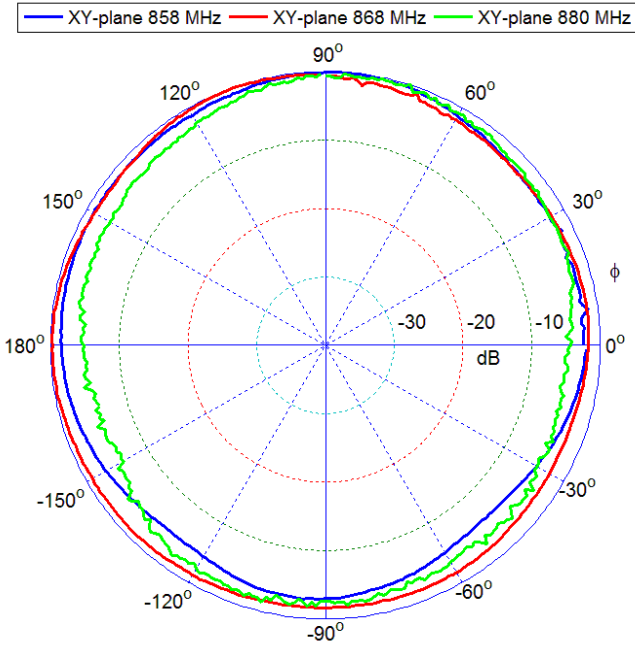


4.2 2D Radiation Pattern

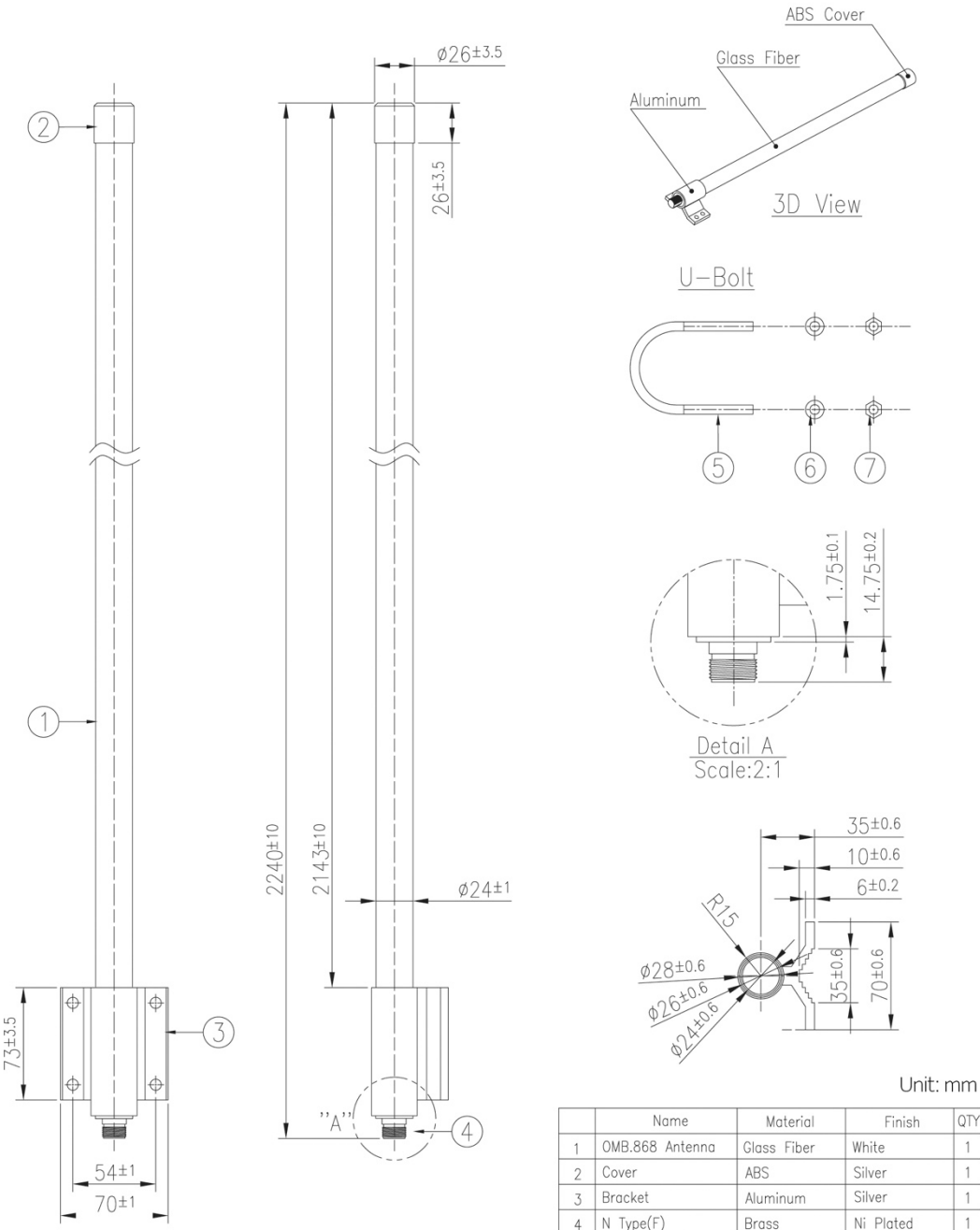
Vertical Pattern – E plane (Normalized)



Horizontal Pattern – H plane (Normalized)



5. Mechanical Drawing



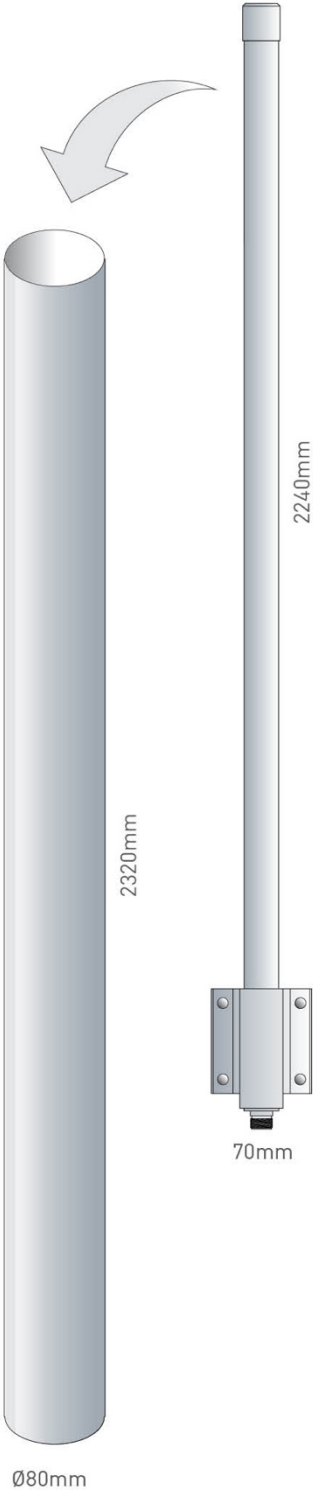
Unit: mm

6. Packaging

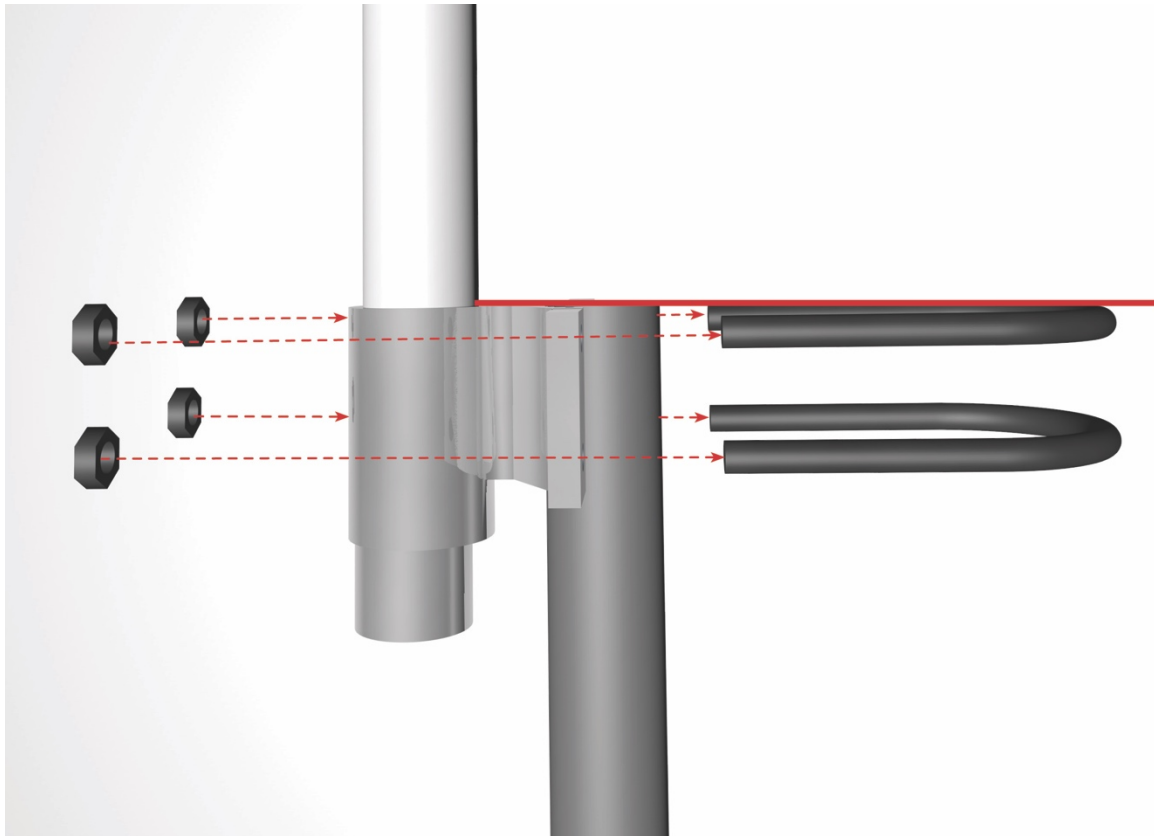
OMB.868.B10F21

Packaging Specifications

- 1 OMB.868.B10F21 per tube
- Tube Dimensions - Ø80mm*Height 2320mm
- Total Weight - 1900g



7. Antenna Installation Guide



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