

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.

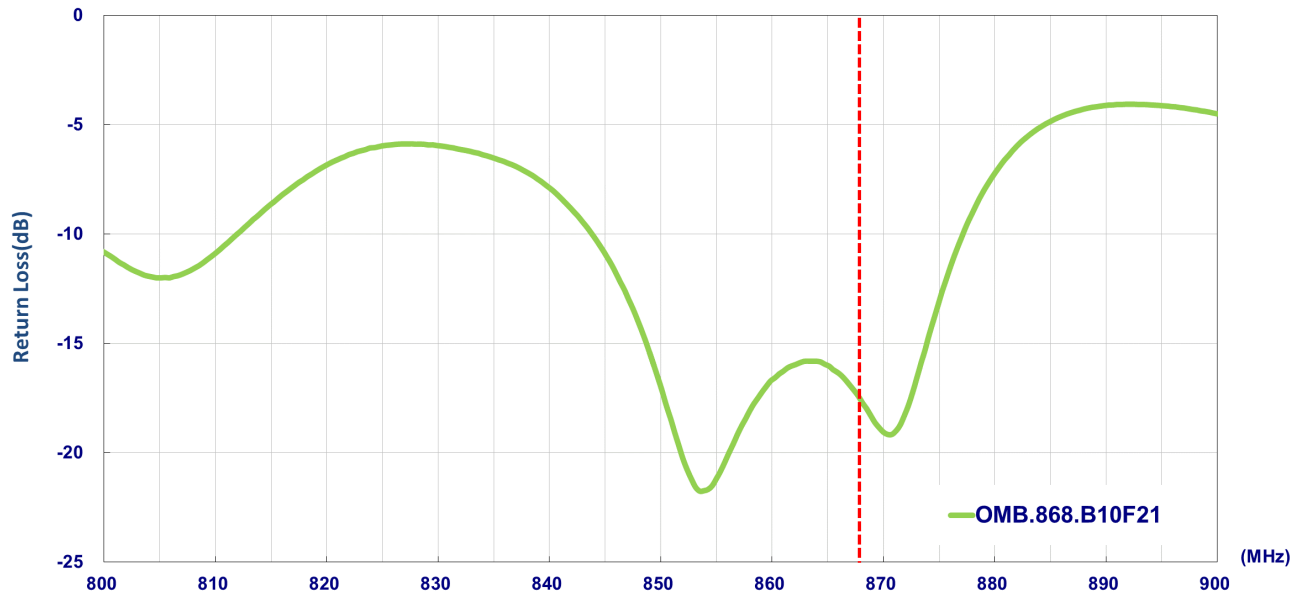
2. Specification

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

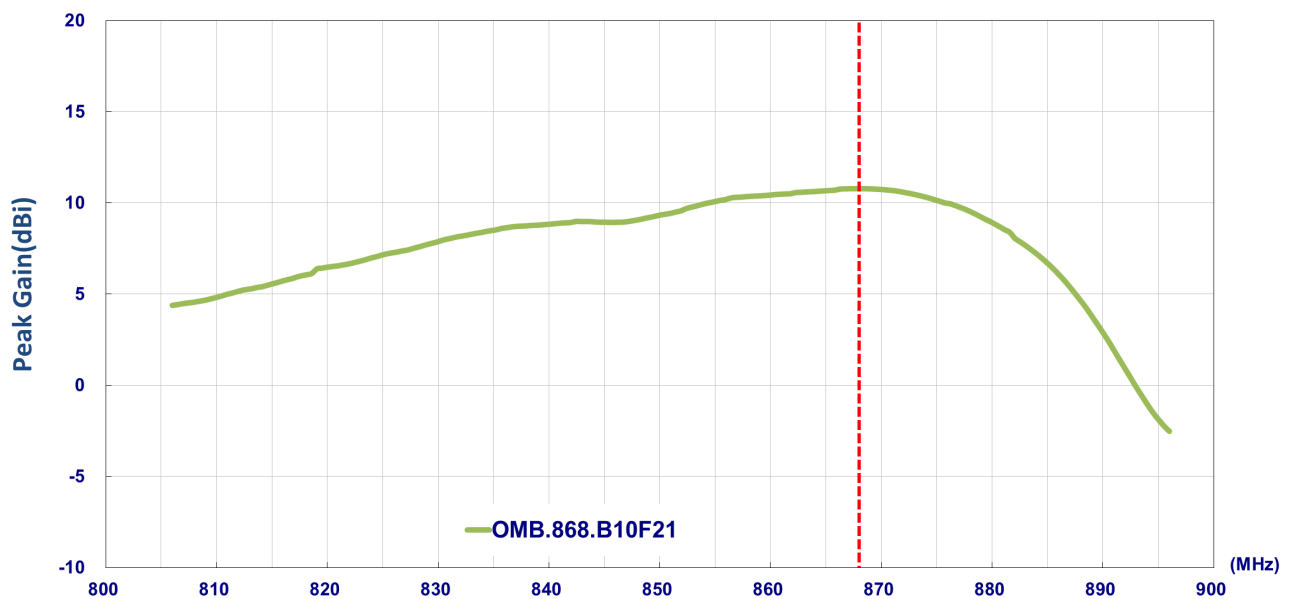
3. Antenna Characteristics

3.1 Return Loss



3.2 Peak Gain

H-plane



4. Antenna Radiation Pattern

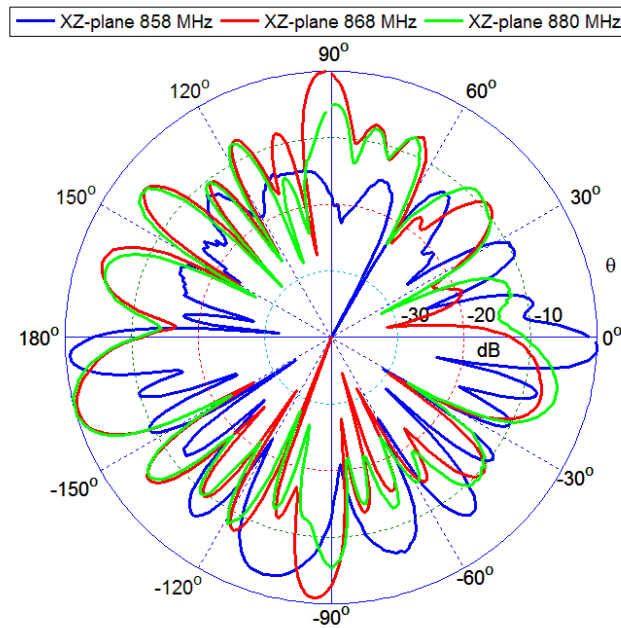
4.1 Measurement Setup

Horizontal Pattern – H plane

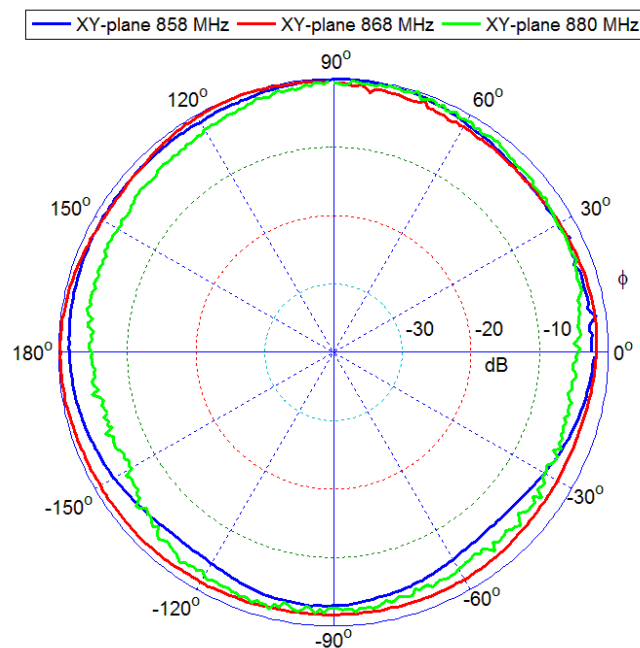


4.2 2D Radiation Pattern

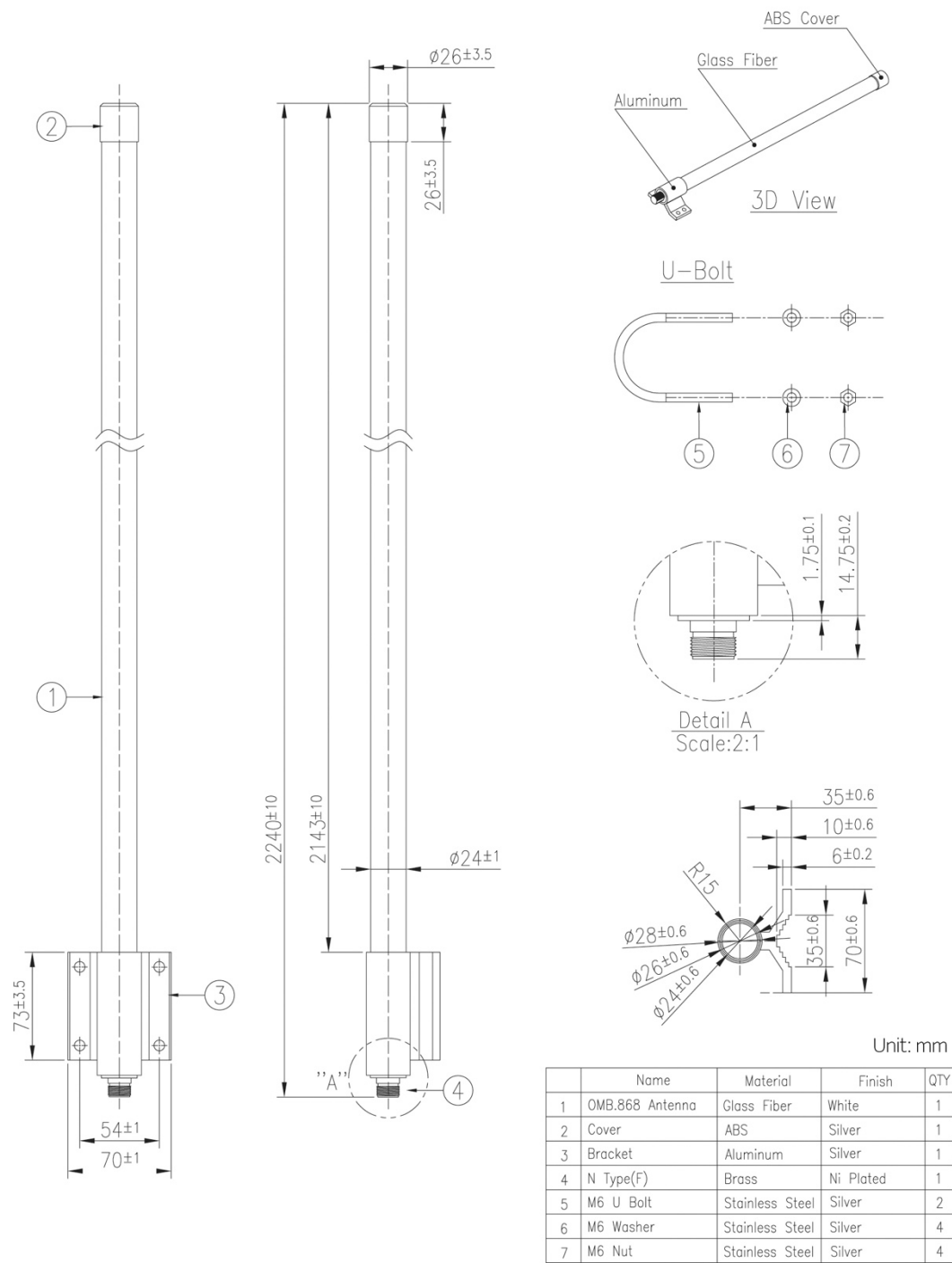
Vertical Pattern – E plane (Normalized)



Horizontal Pattern – H plane (Normalized)



5. Mechanical Drawing

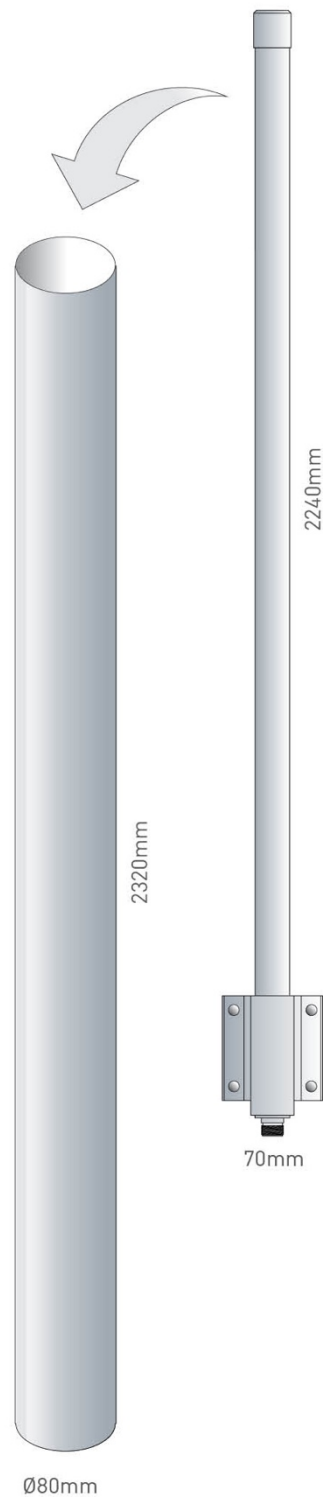


6. Packaging

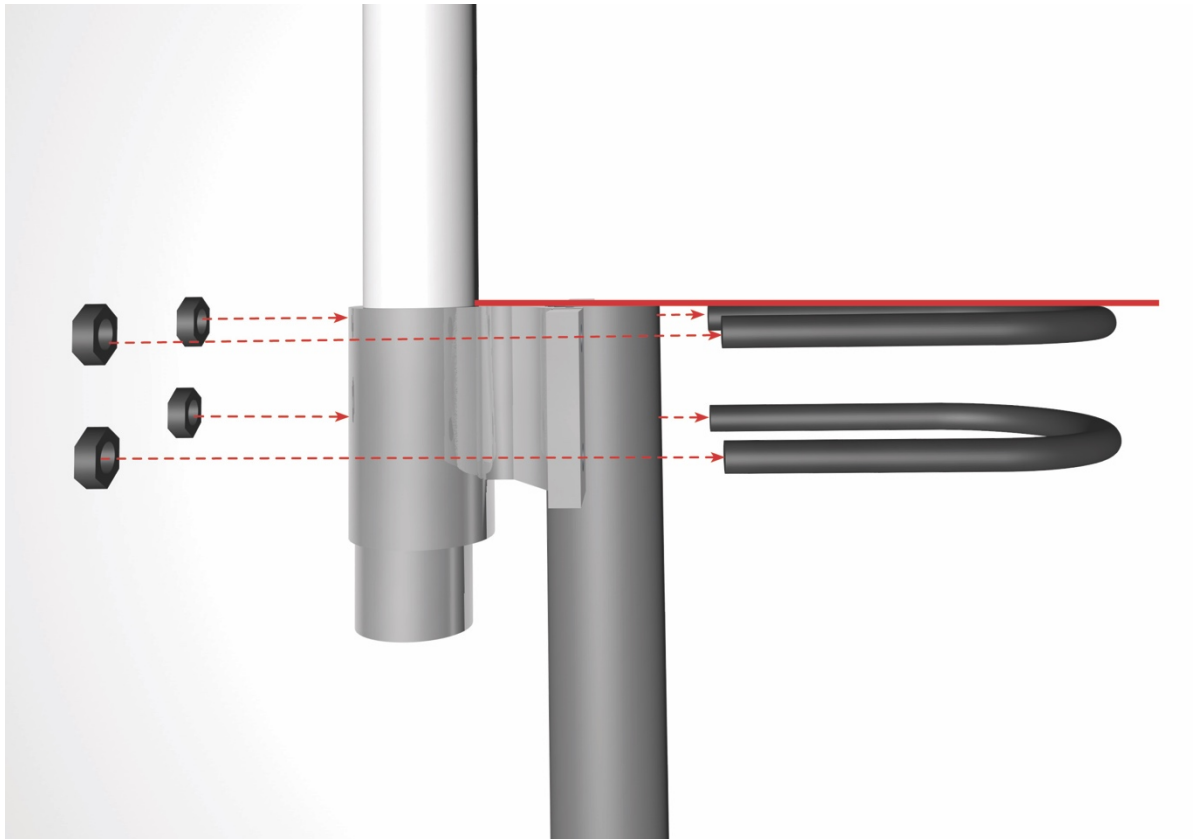
OMB.868.B10F21

Packaging Specifications

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



7. Antenna Installation Guide



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