

Specification

Part No.	:	OMB.868.B12F21
Description	:	Barracuda 868MHz 12dBi Omnidirectional Outdoor Antenna
Features	:	Omni-Directional Radiation Pattern Collinear 11.4 dBi Peak Gain Robust Design for all Weather operation IP65 Waterproof Length: 2240mm Weight: 994g Connector: N-type Female Wall/Pole Mount Bracket Included RoHS Compliant



1. Introduction

The Barracuda OMB.868.B12F21 is a fiberglass omnidirectional outdoor antenna, operating in the 868MHz ISM band and is designed to offer long distance coverage. The antenna is designed for applications such as metering, industrial & environmental monitoring, remote asset monitoring and mesh network applications. The 868MHz band is one of the most widely used license free ISM bands. Typical applications are in SigFox, LoRa and LPWA networks.

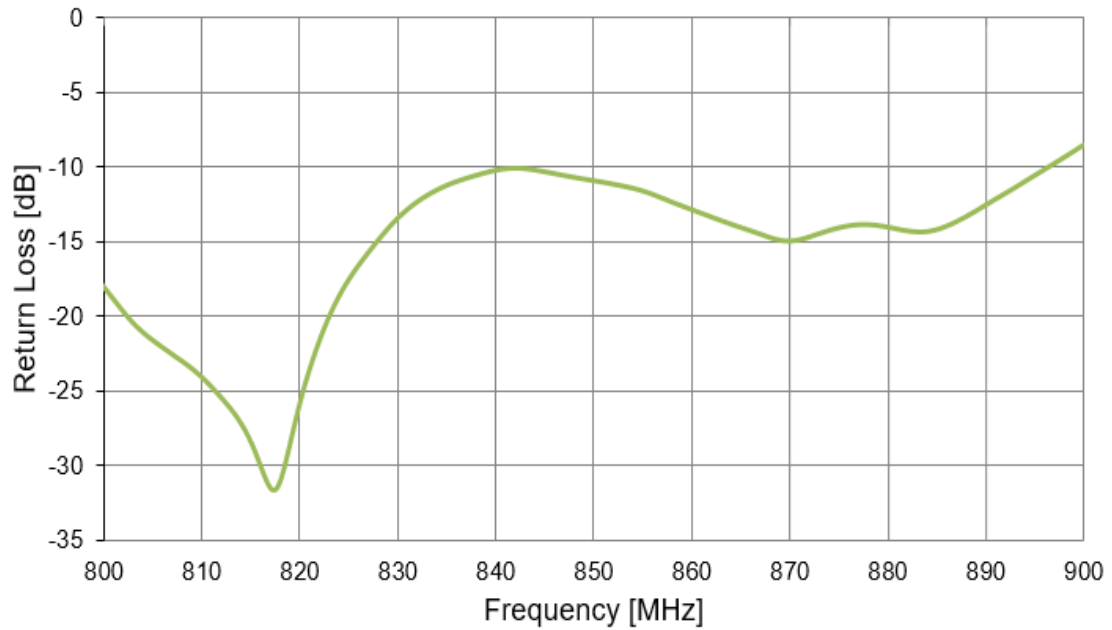
With a 12dBi peak gain, the OMB.868.B12F21 omnidirectional antenna radiates uniformly in the azimuth. This collinear design characteristic provides the best performance, giving optimized coverage and therefore longer range in the horizontal plane over 360 degrees, thus minimizing the amount of nodes needed for a mesh 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 can be connected directly to the access point or telemetry unit or can be mounted on wall or device surface via the N-type connector and a pole-mount and wall-mount bracket is included.

2. Specification

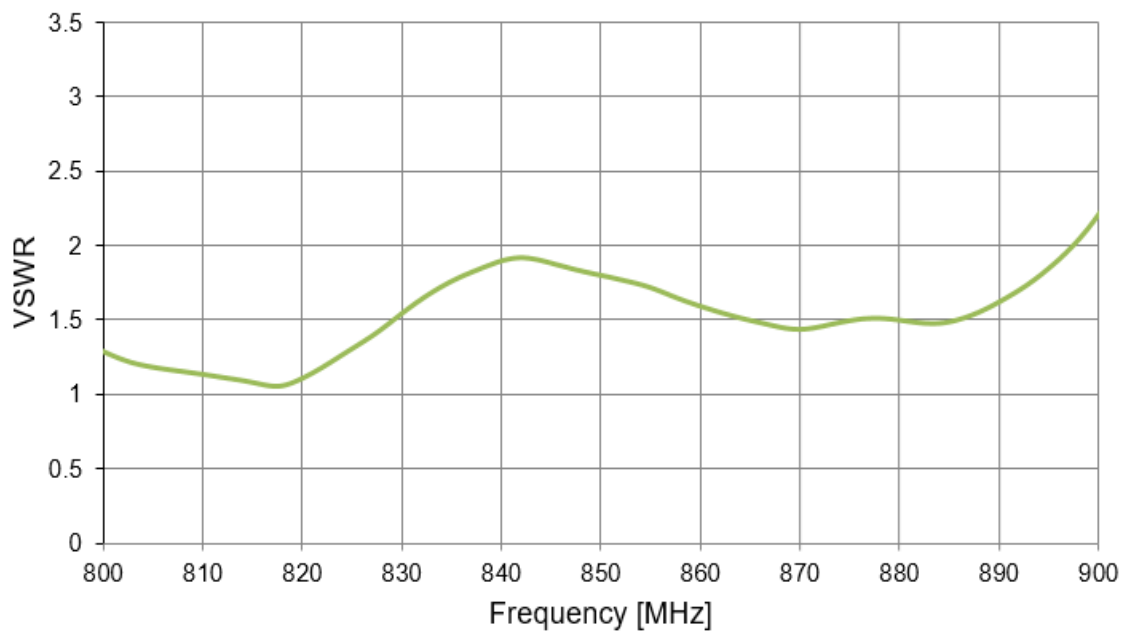
ELECTRICAL	
Standard	ISM 868
Band	860~870MHz
Antenna Type	Collinear
Peak Gain	11.4dBi
Polarization	Vertical
Impedance	50 ohms
Max Input Power	50 watts
VSWR	<2:1
Radiation	Omnidirectional
Vertical Beam-width	10 Deg
Horizontal Beam-width	360 Deg
Antenna Design	Dipole Array
Internal Material	Copper
Connector	N Type Female
MECHANICAL	
Length	2240mm(Max)
Bracket Dimension	70*73mm(Max)
Antenna Weight	994g
Mounting Accessories	70g
Application	Indoor/Outdoor
Radome Material	White Fiberglass
Base Material	Aluminum
Mount Style	Pole Mount/Wall Mount
Mounting	Stainless Steel
Wind Resistance	>150mph(>241km/h)
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

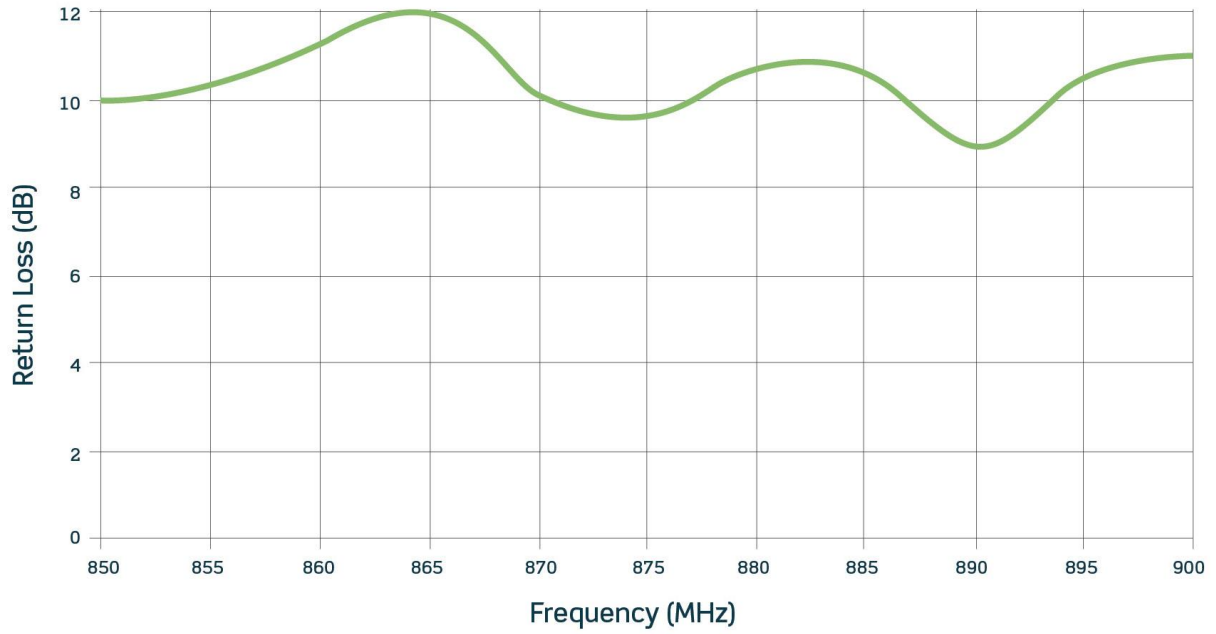
3.1. Return Loss



3.2. VSWR

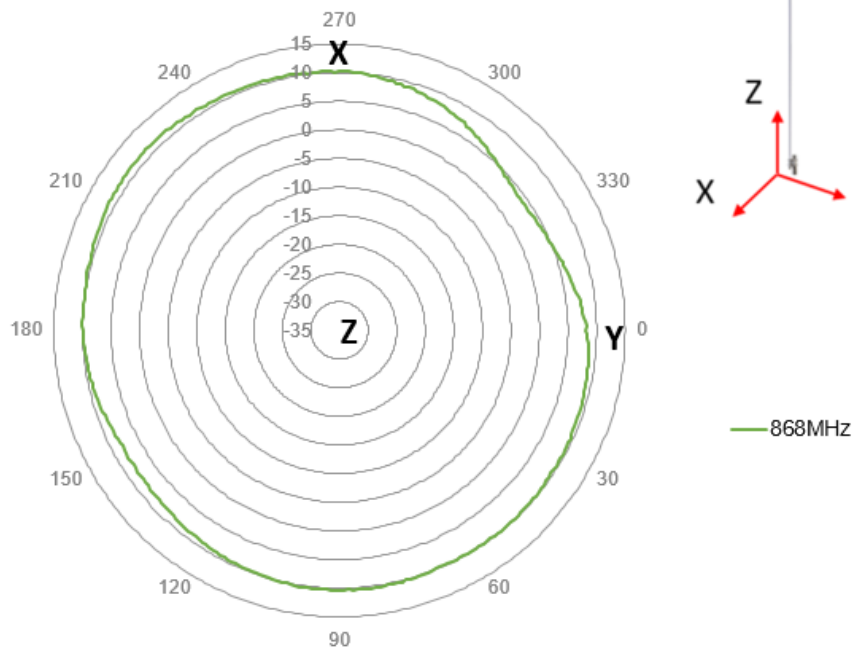


3.3. Peak Gain

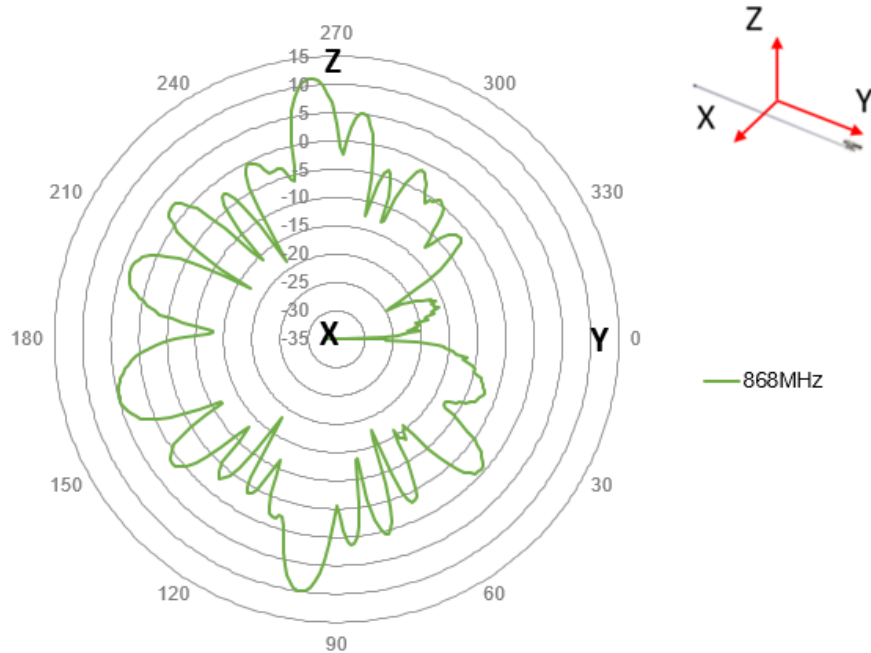


4. 2D Radiation Pattern

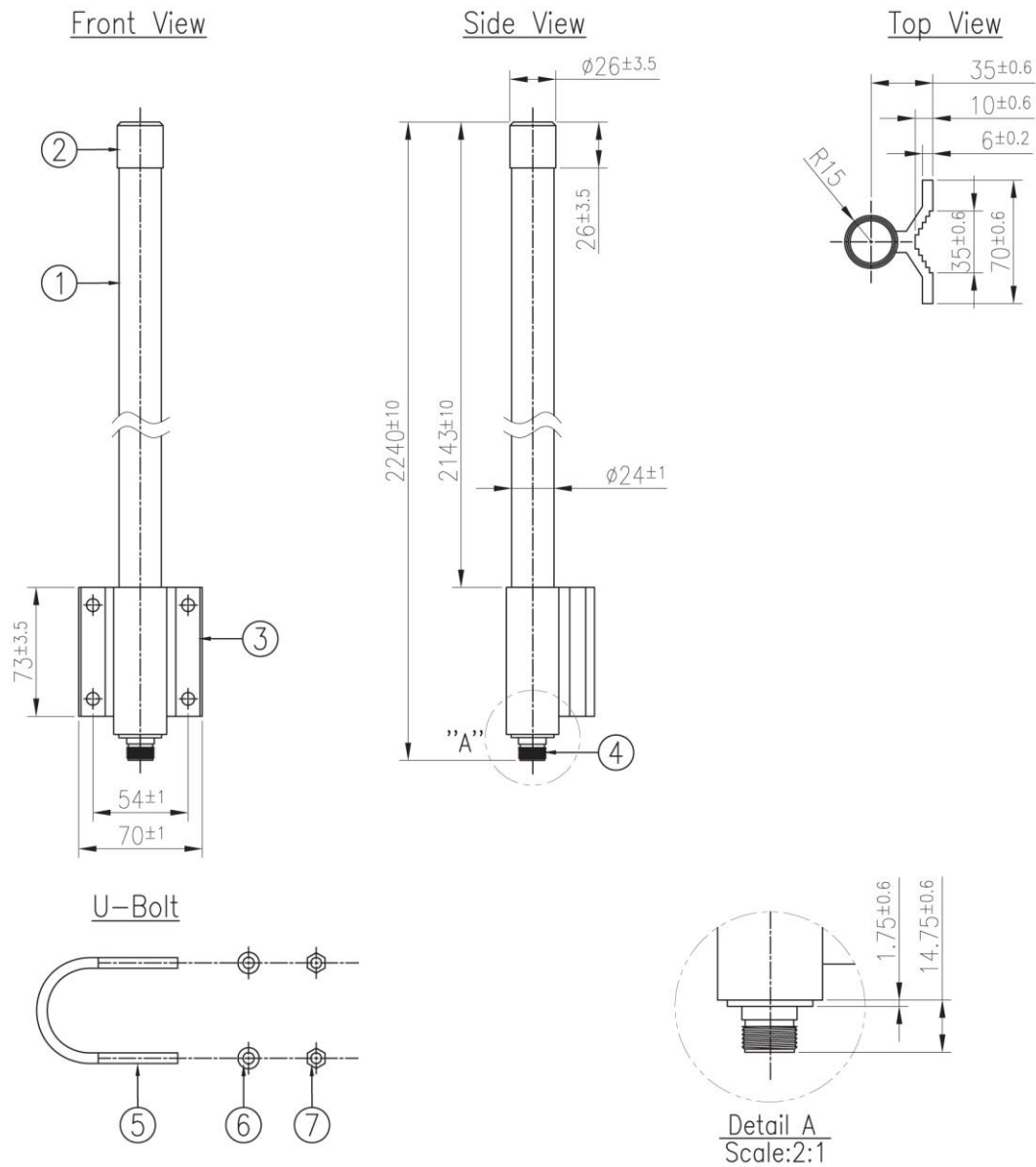
4.1. Azimuth



4.2. Elevation



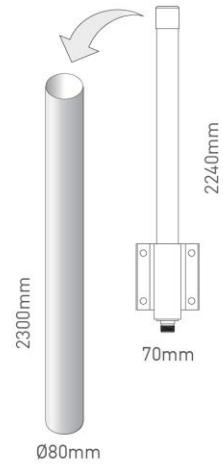
5. Mechanical Drawing (Unit: mm)



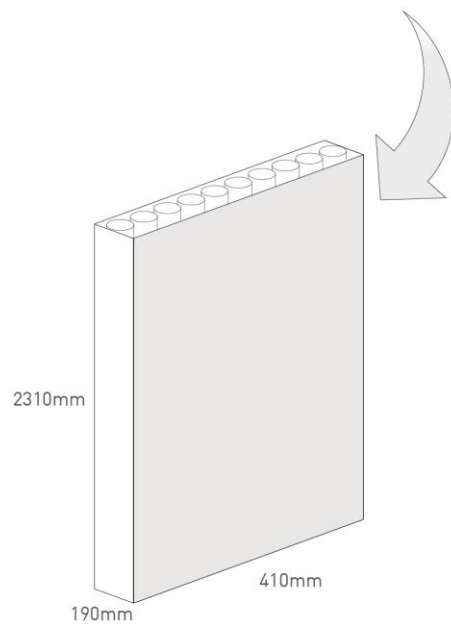
	Name	P/N	Material	Finish	QTY
1	OMB.868 Antenna	001216D000021A	Glass Fiber	White	1
2	Cover	000111K000021A	ABS	Silver	1
3	Bracket	000312B000021A	Aluminum	Silver	1
4	N Type(F)	201211K000021A	Brass	Ni Plated	1
5	M6 U Bolt	000412B000021A	Stainless Steel	Silver	2
6	M6 Washer	000411K010021A	Stainless Steel	Silver	4
7	M6 Nut	000411K020021A	Stainless Steel	Silver	4

6. Packaging

1 OMB.868.B12.F21 per tube
Tube Dimensions - Ø80mm*Height 2300mm
Total Weight - 1800g



10 tubes per carton
Carton Dimensions - 2310*410*190mm
Weight - 20.8Kg



7. Antenna Installation Guide

