

SPECIFICATION

| Part No. | : | OMB.868.B05F21 |
|-------------|---|---|
| Description | : | Barracuda 5dBi 868MHz ISM Band Indoor/Outdoor |
| | | Omnidirectional Antenna |
| Features | : | Omni-Directional Radiation Pattern |
| | | Collinear |
| | | 5 dBi Peak Gain |
| | | Robust Design for all Weather operation |
| | | IP65 Waterproof |
| | | Length: 818.75mm, Weight: 580g |
| | | Connector: N-type Female |
| | | Wall/Pole Mount Bracket Included |
| | | RoHS compliant |



1.Introduction

The Barracuda 868MHz ISM Outdoor antenna is designed to a have a long distance coverage. Omni-directional high gain across all bands ensures constant reception and transmission. The UV resistant coating with fiberglass housing makes this antenna suitable to be mounted in robust outdoor environment, pole-mounting and wall-mounting bracket is included.

The antenna finds its usage in metering, industrial monitoring and security applications.

This antenna is suitable to use as part of narrow channel M2M Sigfox Network, for simple M2M management in cities. The main applications would be Smart Cities, Utilities, Public Transport.

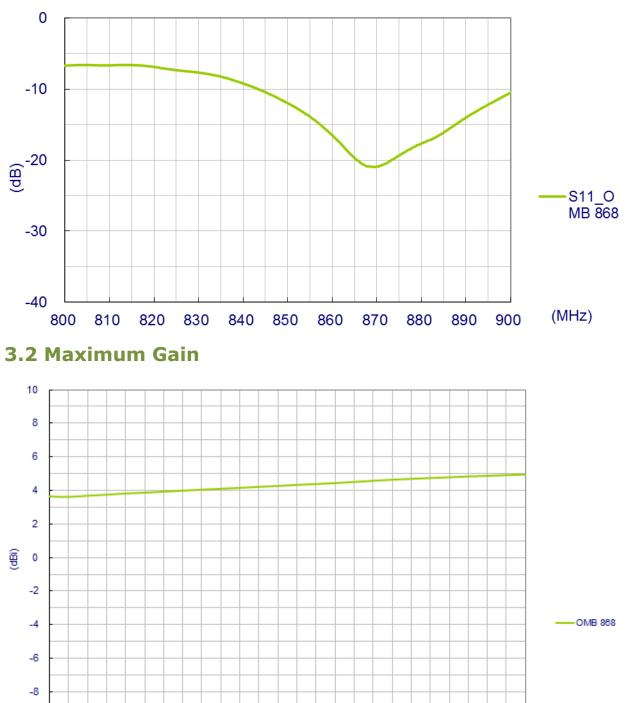


2. Specification

| ELECTRICAL | | | | | | |
|-----------------------|------------------------|--|--|--|--|--|
| Standard | ISM 868 | | | | | |
| Band | 860~870MHz | | | | | |
| Antenna Type | Collinear | | | | | |
| Gain(max) | 5dBi | | | | | |
| Polarization | Vertical | | | | | |
| Impedance | 50 ohms | | | | | |
| Max Input Power | 50 watts | | | | | |
| VSWR | <1.5:1 | | | | | |
| Radiation | Omnidirectional | | | | | |
| Vertical Beam-width | 16 Deg | | | | | |
| Horizontal Beam-width | 360 Deg | | | | | |
| Antenna Design | Dipole Array | | | | | |
| Internal Material | Copper | | | | | |
| Connector | N Type Female | | | | | |
| MECHANICAL | | | | | | |
| Length | 818.75mm(Max) | | | | | |
| Bracket Dimension | 70*53mm(Max) | | | | | |
| Radome Diameter | 24mm | | | | | |
| Antenna Weight | 580g | | | | | |
| 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) | | | | | |
| Housing | Fiberglass | | | | | |
| 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



870

875

3.1 Return Loss

-10

855

860

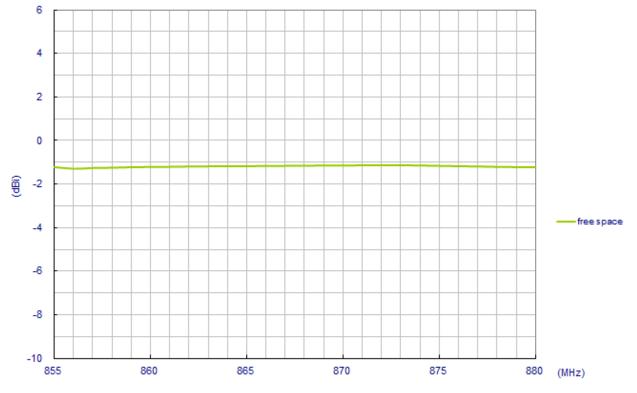
865

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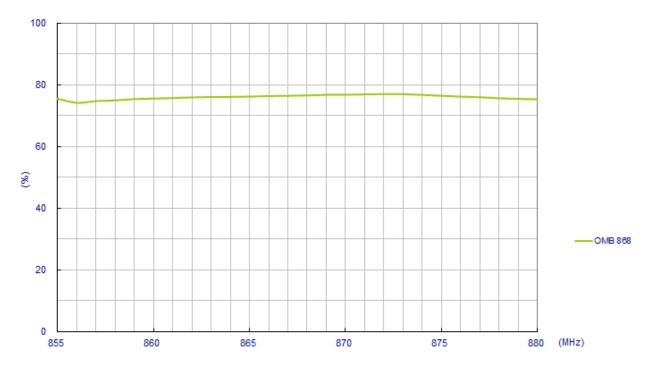
880 (MHz)



3.3 Average Gain

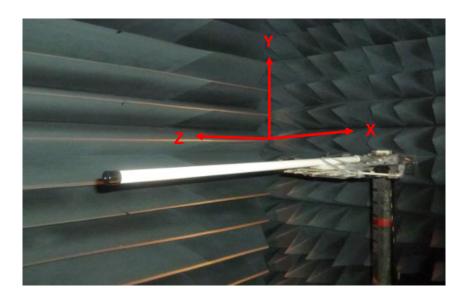


3.4 Efficiency

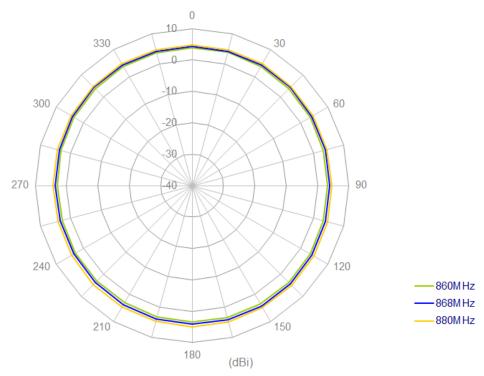




4. 3D Radiation Property



XY Plane



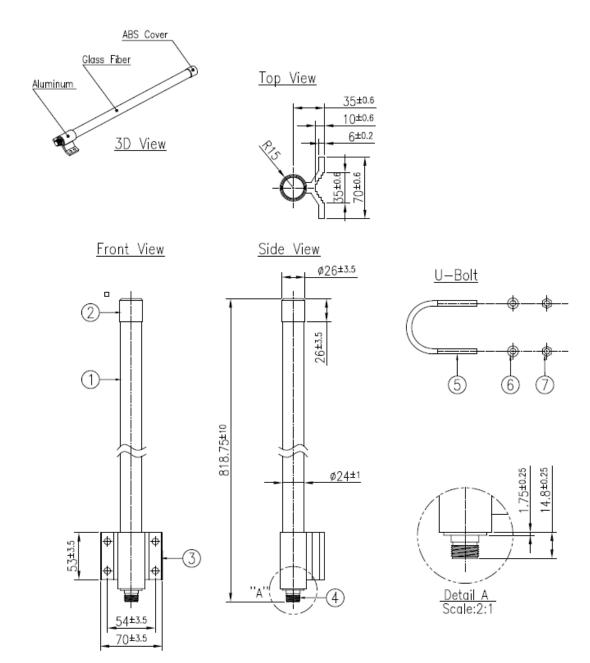


-20 860M Hz -868M Hz 880M Hz (dBi)

XZ Plane



5. Drawing

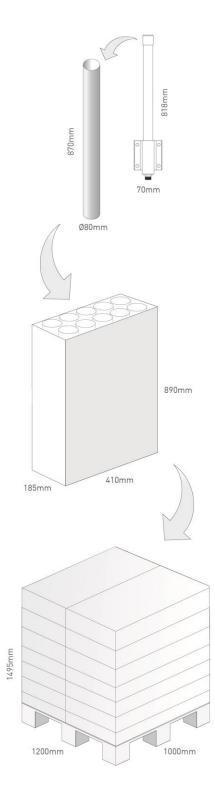


| | Name | P/N | Material | Finish | QTY |
|---|-----------------|----------------|-----------------|-----------|-----|
| 1 | OMB.868 Antenna | 001212B010021A | Glass Fiber | White | 1 |
| 2 | Cover | 000111K000021A | ABS | Silver | 1 |
| 3 | Bracket | 000312B000021A | Aluminum | Silver | 1 |
| 4 | N 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 Spec

| 1 OMB.868.B05F21 per tube Tube Dimensions - Ø80mm*Height 870mm Total Weight - 835g



10 tubes per carton 10 pcs OMB.868.B05F21 per carton Carton Dimensions - 890*410*185mm Weight - 9.4kg

Pallet Dimensions 1200mm*1000mm*1495mm

- 14 Cartons per Pallet
- 2 Cartons per layer
- 7 Layers



7. Antenna Installation Guide

