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SPECIFICATION

868MHz ISM Band Dipole Antenna

| Part No. | : | OMB.868.B05F21 |
|--------------|---|--|
| Product Name | : | Barracuda 5dBi 868MHz ISM Band Indoor/Outdoor Omnidirectional Antenna |
| Feature | : | Suitable to use in robust outdoor environment Dimensions: Height 1093.5mm 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.

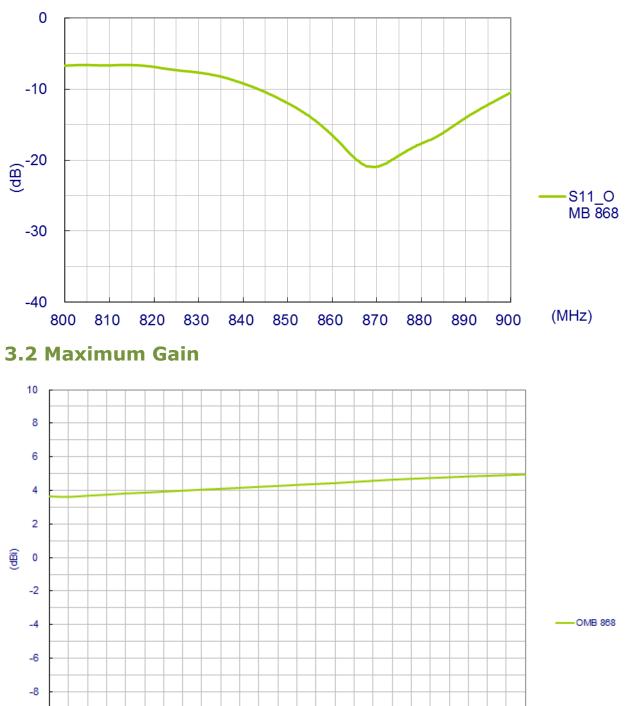


2. Specification

| 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 | 38 Deg | | | | | |
| Horizontal Beam-width | 360 Deg | | | | | |
| Antenna Design | Dipole Array | | | | | |
| Internal Material | Copper | | | | | |
| Connector | N Type Female | | | | | |
| | MECHANICAL | | | | | |
| Length | 1094mm(Max) | | | | | |
| Base Diameter | 70*55mm(Max) | | | | | |
| Antenna Weight(G.W) | 680g | | | | | |
| Mounting Accessories(G.W) | 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 | -20°C to +80°C | | | | | |
| Operating Temperature | -20°C to +60°C | | | | | |
| Operating Humidity | 10%~80% non-condensing | | | | | |
| Storage Humidity | 5%~80% non-condensing | | | | | |



3. Antenna Characteristics



870

875

3.1 Return Loss

-10

855

860

865

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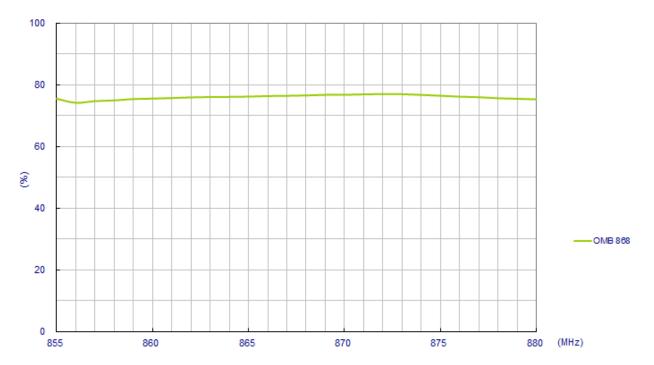
880 (MHz)



6 4 2 0 ĝ -2 -free space -4 -6 -8 -10 855 860 865 870 880 (MHz) 875

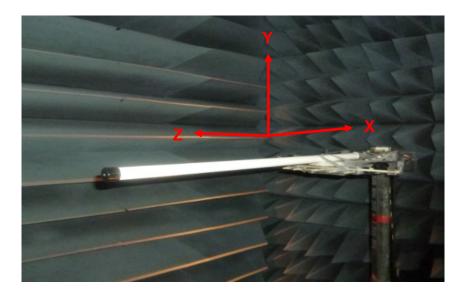
3.3 Average Gain







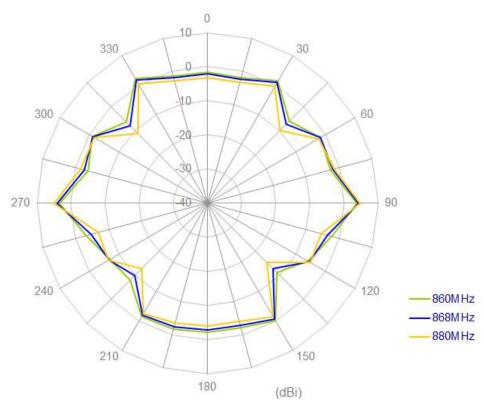
4. 3D Radiation Property





0 10 330 30 0 10 300 60 -20 -30 -40 270 90 240 120 -860M Hz -868MHz -880M Hz 210 150 180 (dBi)

XZ Plane

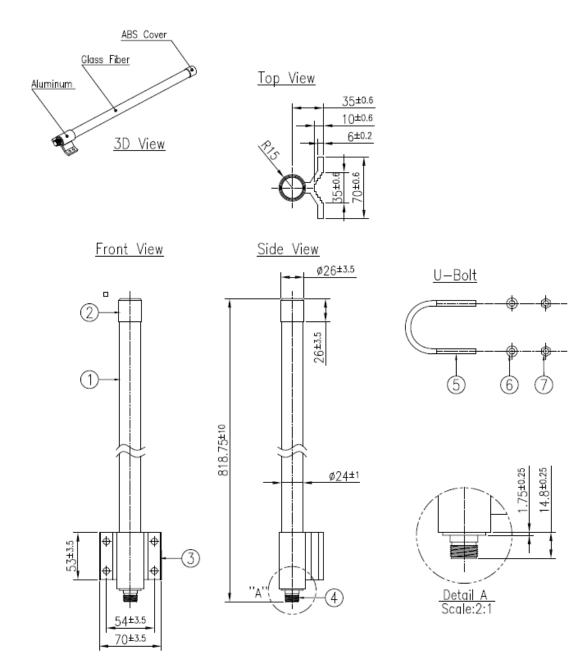


XY Plane

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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 |



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