

# SPECIFICATION

## 915MHz ISM Band Dipole Antenna

- Part No. : **OMB.915.B03F21**
- Product Name : 3.5dBi 902-915MHz ISM Band Indoor/Outdoor Omnidirectional Antenna
- Feature : Suitable to use in robust outdoor environment  
Dimensions: Height 320mm  
**RoHS compliant**



## 1. Introduction

The OMB.915.B03F21 is a fiberglass omnidirectional outdoor antenna, operating in the 902-915MHz ISM band, 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 OMB.915 operates at 902-915MHz, one of the most widely used license free ISM bands, with a 3.5dBi peak gain. The 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.

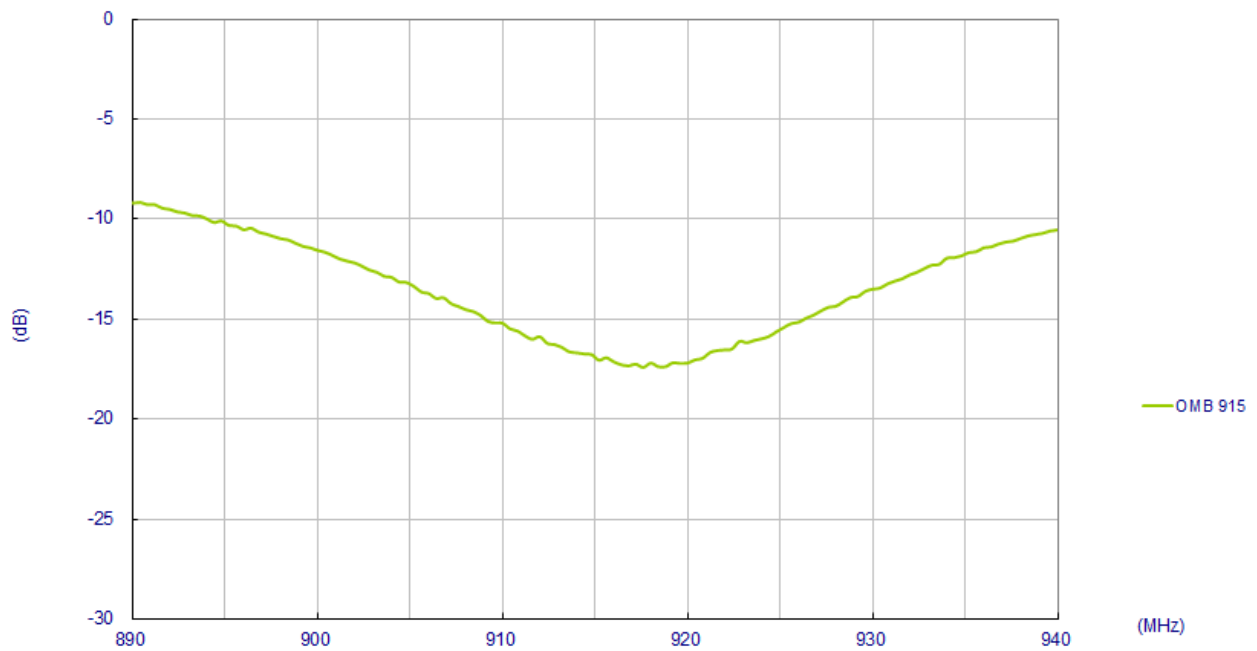
The UV resistant fiberglass housing enables the OMB antenna to be utilized in all kinds of harsh environments, making it more robust and safer than traditional whip antennas. It can be connected directly to the access point or telemetry unit, or can be mounted on wall or device surface via the N-type connector.

## 2. Specification

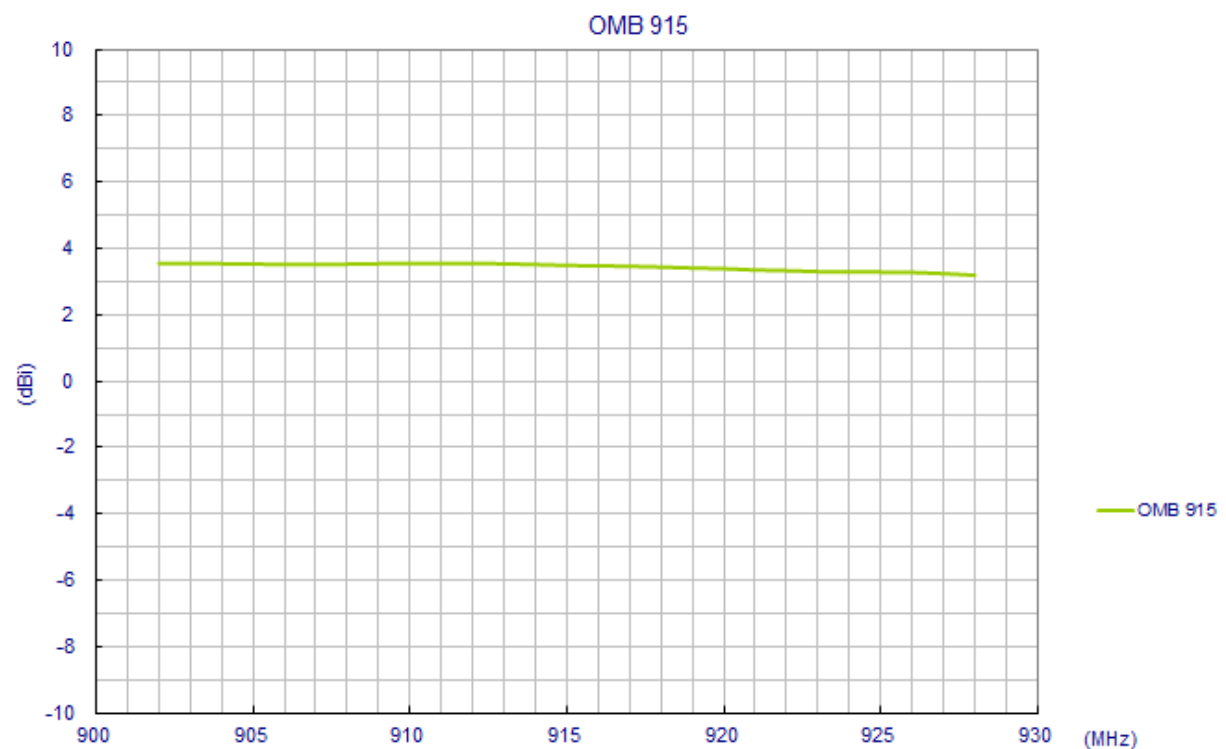
ELECTRICAL	
Standard	ISM 915
Band	902~928MHz
Antenna Type	Collinear
Gain(max)	3.5dBi
Polarization	Vertical
Impedance	50 ohms
Max Input Power	50 watts
VSWR	<1.5:1
Radiation	Omnidirectional
Vertical Bandwidth	15 Deg
Horizontal Bandwidth	360 Deg
Antenna Design	Dipole Array
Internal Material	Copper
Connector	N Type Female
MECHANICAL	
Length	320mm(Max)
Base Diameter	70*55mm(Max)
Antenna Weight(G.W)	760g
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	-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

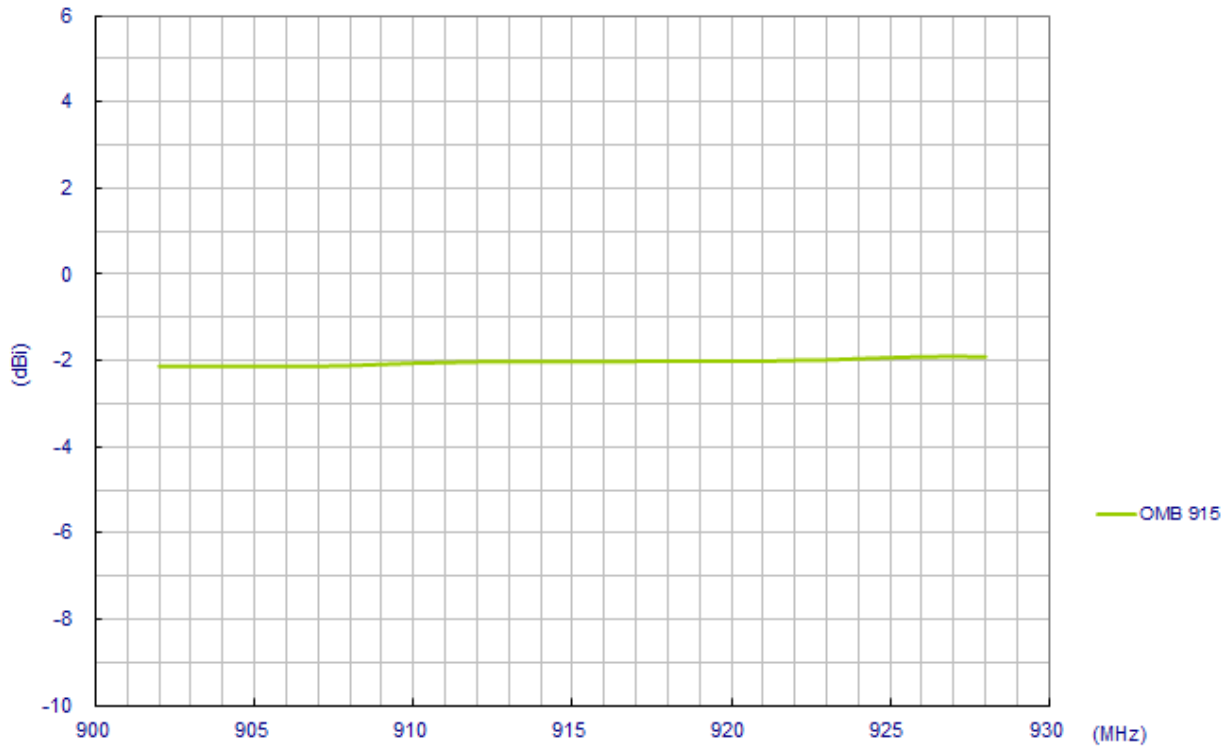
#### 3.1 Return Loss



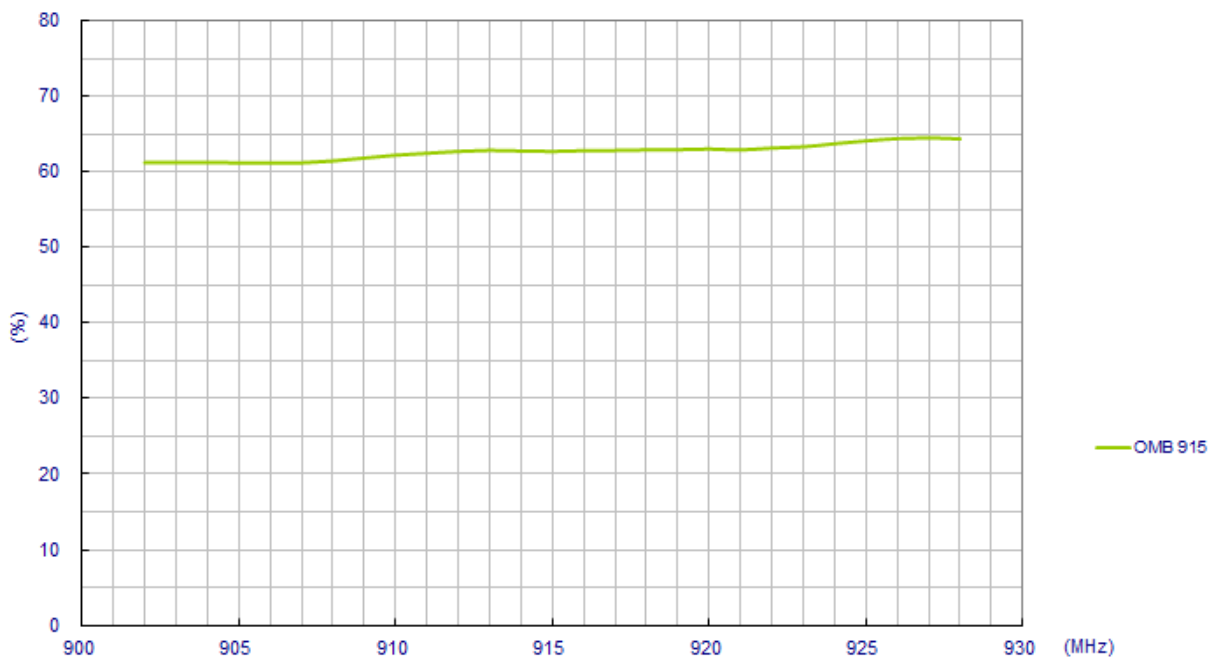
#### 3.2 Maximum Gain



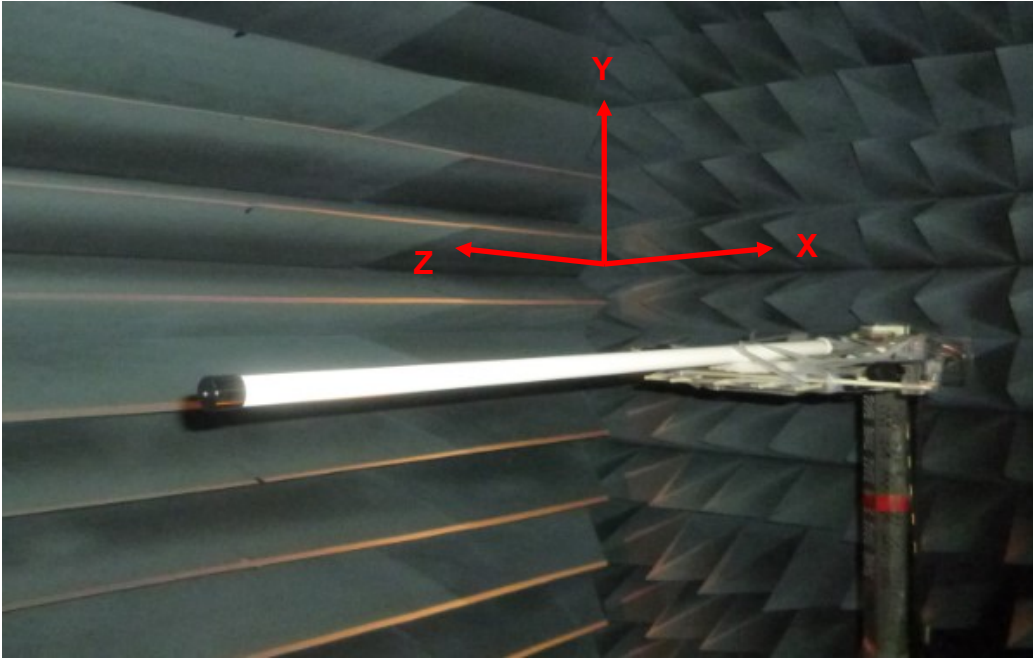
### 3.3 Average Gain



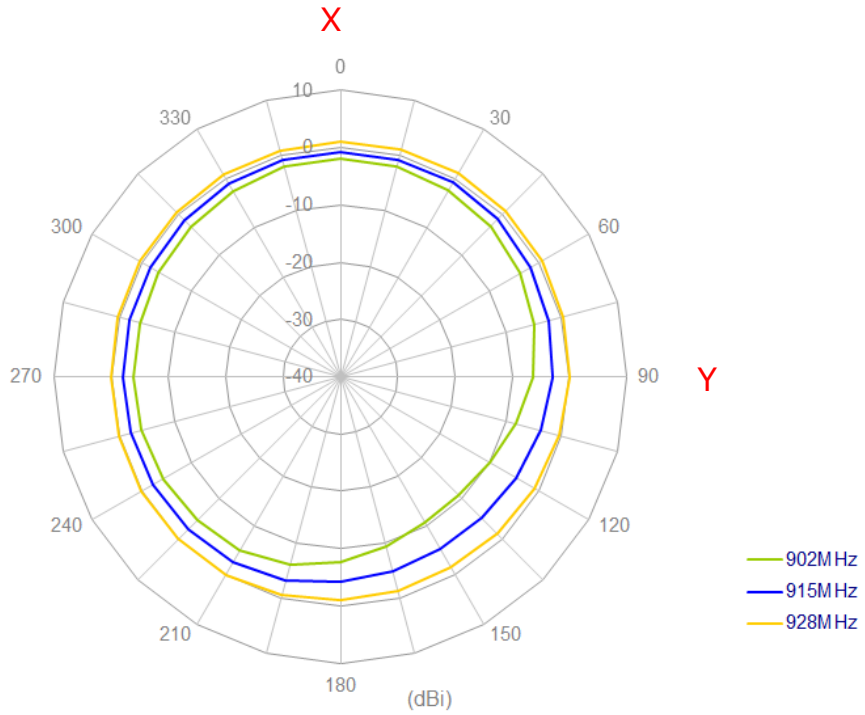
### 3.4 Efficiency



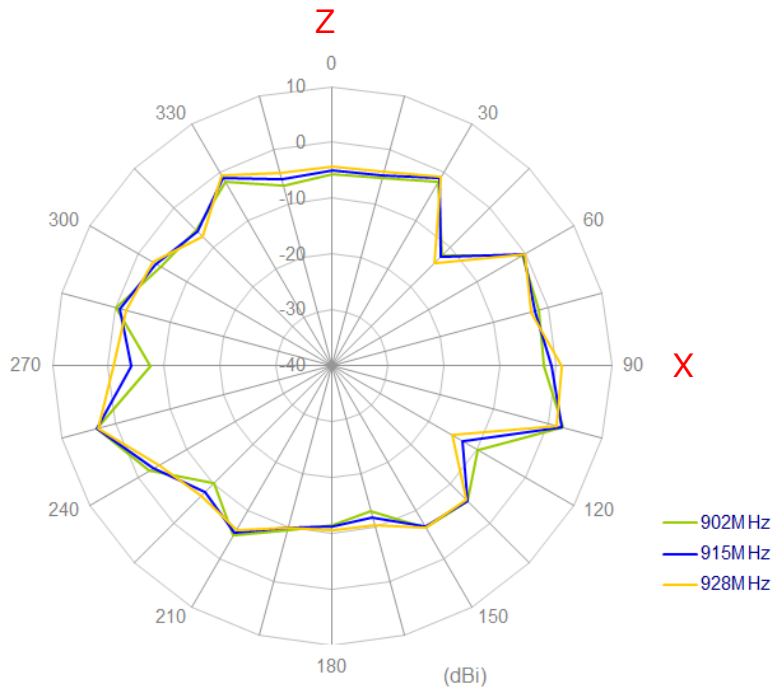
## 4.3D Radiation Property



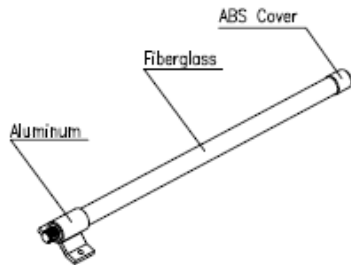
### XY Plane



### XZ Plane



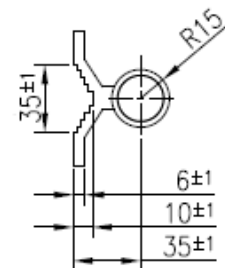
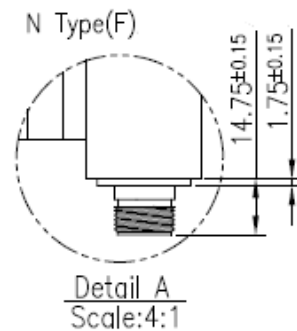
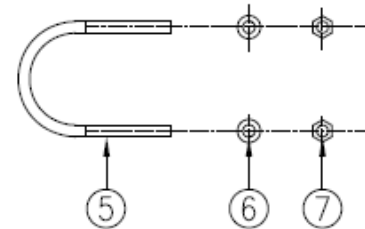
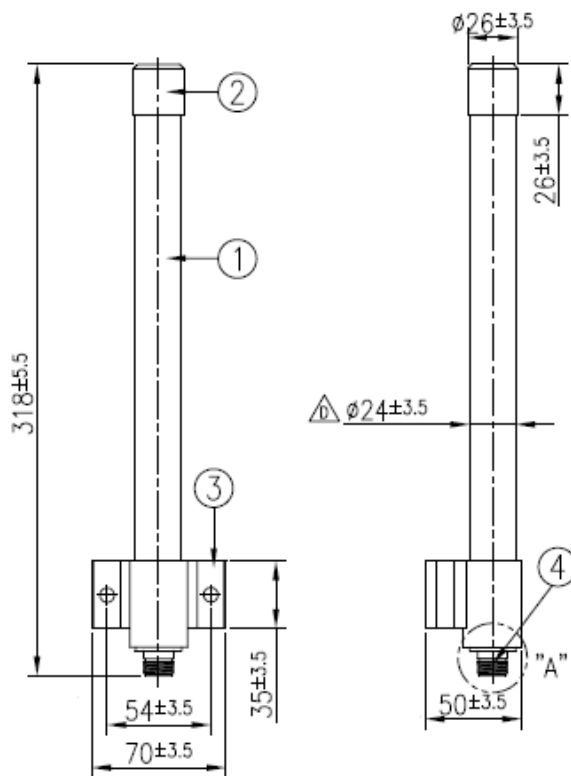
## 5. Drawing



Top View

Side View

U-Bolt



	Name	P/N	Material	Finish	QTY
1	OMB.915 Antenna	001212B020021A	Glass Fiber	White	1
2	Cover	000111K000021A	ABS	Sliver	1
3	Bracket	000311K000021A	Aluminum	Silver	1
4	N Type(F)	201211K000021A	Brass	Ni Plated	1
5	M6 U Bolt	000412B000021A	Stainless Steel	Sliver	1
6	M6 Washer	000411K010021A	Stainless Steel	Silver	2
7	M6 Nut	000411K020021A	Stainless Steel	Sliver	2





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