

Part No: OMB.915.B12F21

### **Description:**

Barracuda 915MHz 10dBi

Omnidirectional Outdoor Antenna

### **Features:**

Suitable to use in Robust Outdoor Environment

Connector: N Type Female

Dimensions: 2240mm x Ø24mm

Wall and Pole Mount

RoHS and REACH Compliant



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The Barracuda OMB.915.B12F21 is a fiberglass omnidirectional outdoor antenna, operating in the 915MHz 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 915MHz band is one of the most widely used license free ISM bands. Typical applications are in SigFox, LoRa and LPWA networks.

With a 10dBi peak gain, the OMB.915.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. This antenna is an ideal product for developing your own Helium Network on the 915MHz spectrum.

Custom antenna modifications are subject to possible NRE and minimum order quantity. For further information please contact your regional Taoglas customer support team.



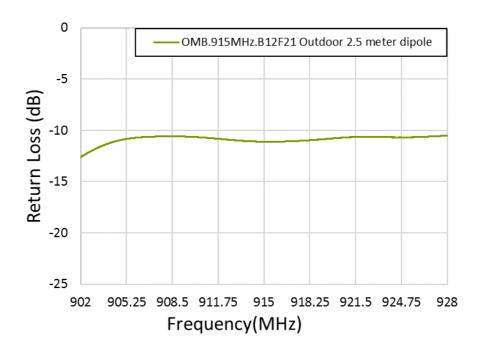
# 2. Specifications

	Antenna				
Standard	ISM 915				
Band	902~928MHz				
Antenna Type	Collinear				
Peak Gain	11dBi				
Polarization	Vertical				
Impedance	50 ohms				
Max Input Power	200 watts				
VSWR	<2:1				
Radiation	Omnidirectional				
Vertical Beam-width	12 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)				
Radome Diameter	24mm				
Antenna Weight (G.W)	994g				
Mounting Accessories (G.W)	70g				
Application	Indoor/Outdoor				
Radome Material	White Fiberglass				
Mount Style	Pole Mount(35mm~50mm)/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				

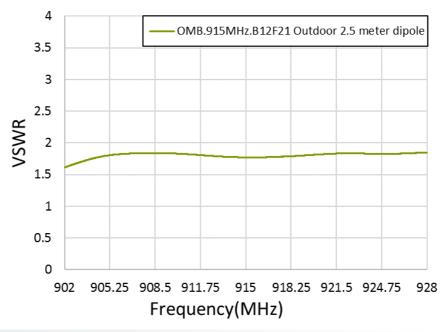


## 3. Antenna Characteristics

### 3.1 Return Loss

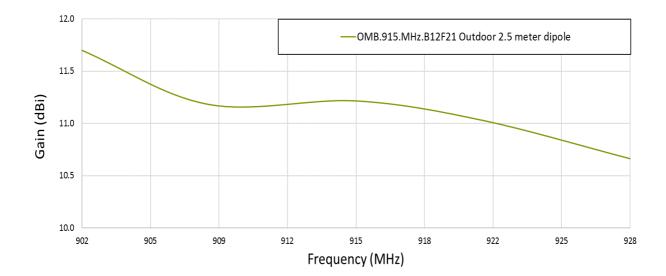


## 3.2 VSWR



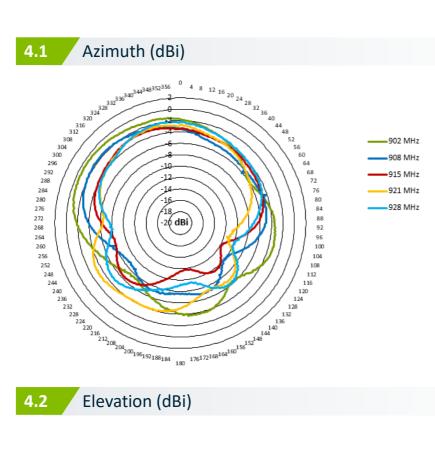
3.3 Average Gain

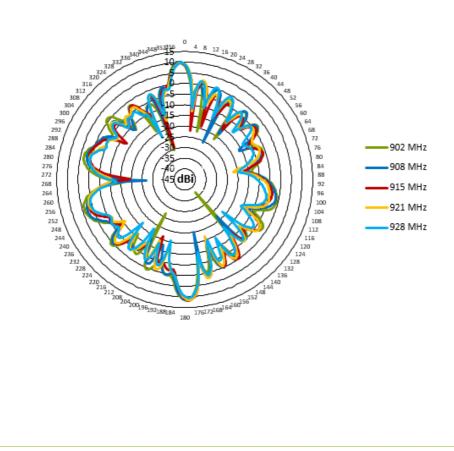






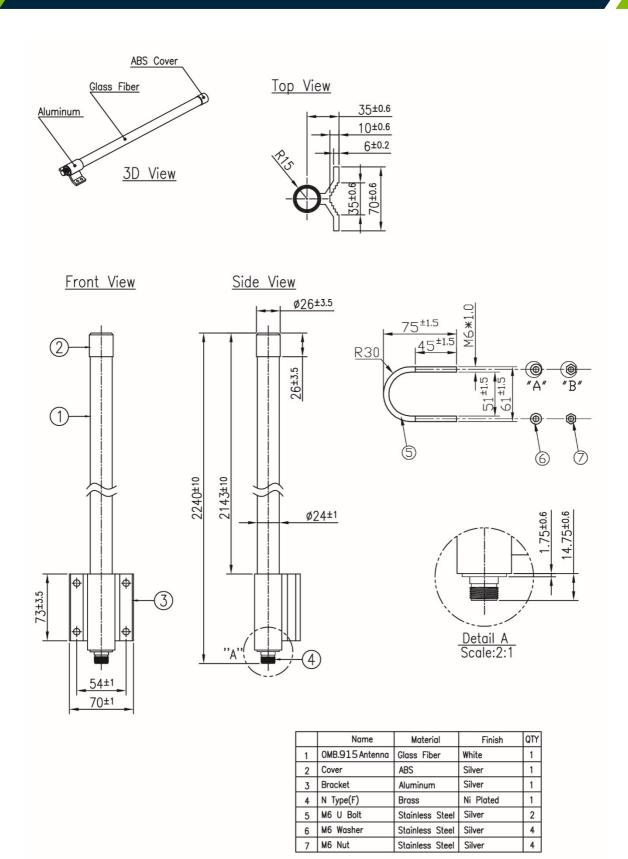
## 2D Radiation Patterns







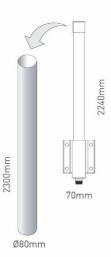
# 5. Mechanical Drawing (Units: mm)



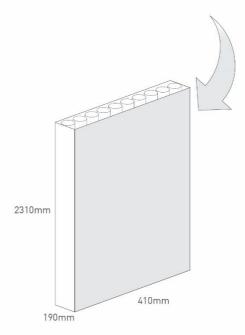


# 6. Packaging

| 1 OMB.915.B12.F21 per tube | Tube Dimensions - Ø80mm\*Height 2300mm | Total Weight - 1800g

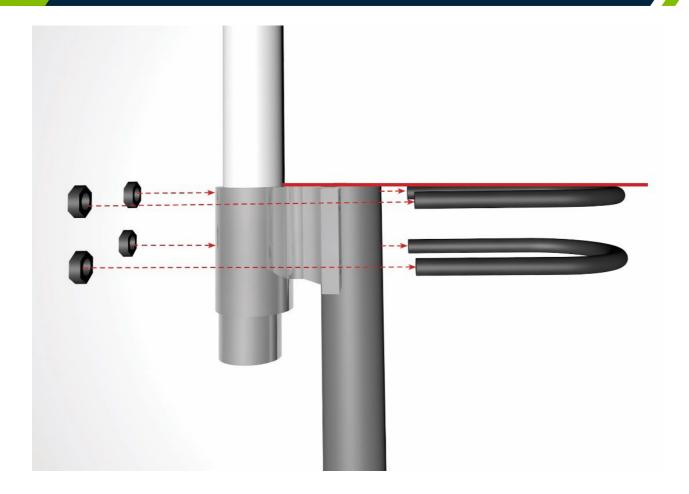


10 tubes per carton Carton Dimensions - 2310\*410\*190mm Weight - 20.8Kg





# 7. Antenna Installation Guide



<sup>\*</sup>Please note when using this in conjunction with a pole, the bottom of the antenna should be level with the top of the pole as shown by the red line above



### Changelog for the datasheet

### SPE-17-8-087 - OMB.915.B12F21

Revision: D		
Date:	2022-03-02	
Changes:	Changed template and changed 10dB	
Changes Made by:	Erik Landi	

### **Previous Revisions**

Revision: C (Current Version)				
Date:	2018-03-27			
Changes:	Added Field Test Section			
Changes Made by:	Jack Conroy			

Revision: B				
Date:	2018-02-08			
Changes:	Added Installation Guide			
Changes Made by:	Jack Conroy			

Revision: A				
Date:	2017-11-21			
Changes:	Initial Release			
Changes Made by:	Jack Conroy			





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