

# **SPECIFICATION**

Part No.	OMB.450.B06F21		
Description :	450MHz-470MHz LTE BAND 31/ CDMA / ISM 6dBi Omni Directional Outdoor Antenna with N Type Female Connector, U-Bolt, 1094mm Length		
Features :	Omni-Directional Radiation Pattern Collinear 6dBi peak gain Robust design for all weather operation IP65 waterproof Length: 1,094mm, Weight: 1,300g N Type Female connector Wall mount bracket included RoHS compliant		



### **1.Introduction**

The OMB.450.B06F21 is a 6dBi LTE BAND 31 / CDMA / ISM 450MHz to 470MHz fiberglass omni-directional outdoor antenna. The antenna is designed for applications such as metering, industrial/environmental monitoring, remote asset monitoring, and mesh network applications.

The omni-directional antenna radiates uniformly in the azimuth. The high peak gain collinear dipole array design provides the best performance because the antenna gives maximum coverage range in the horizontal plane over 360 degrees, thus minimizing the amount of routers, base stations or nodes needed for a network.

The UV resistant fiberglass housing enables the OMB antenna to be weathered 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/device surface via the N-type connector. Connector is customizable subject to MOQ.

A smaller 3dBi model is also available, the OMB.450.B03F21.



## 2. Specification

ELECTRICAL				
Standard	ISM 450			
Band	450 ~ 470 MHz			
Antenna Type	Collinear Dipole Array			
Peak Gain	6 dBi			
Polarization	Vertical			
Impedance	50 ohms			
Max Input Power	100 watts			
VSWR	1.5:1			
Radiation	Omni-Directional			
Vertical Beamwidth	38 Deg			
Horizontal Beamwidth	360 Deg			
Internal Material	Copper			
Connector	N Type Female			
MECHANICAL				
Length	1094 mm(Max)			
Bracket Dimension	70 x 35mm(Max)			
Antenna Weight	1300 g			
Mounting Accessories Weight	70g			
Application	Indoor/Outdoor			
Radome Material	White Fiberglass			
Bracket Material	Aluminum			
Mount Style	Pole Mount/Wall Mount			
Mount Hardware Material	Stainless Steel			
Wind Resistance	>150mph (>241km/h)			
Waterproof	IP65			

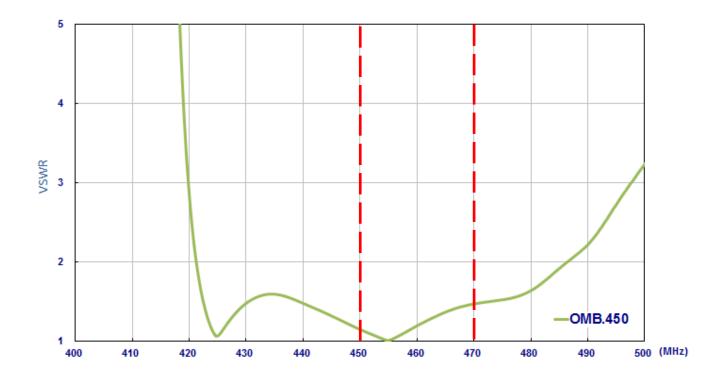


ENVIRONMENTAL				
Storage Temperature	-40°C to +85°C			
Operating Temperature	-40°C to +85°C			
Operating Humidity	10%~90% non-condensing			
Storage Humidity	5%~90% non-condensing			



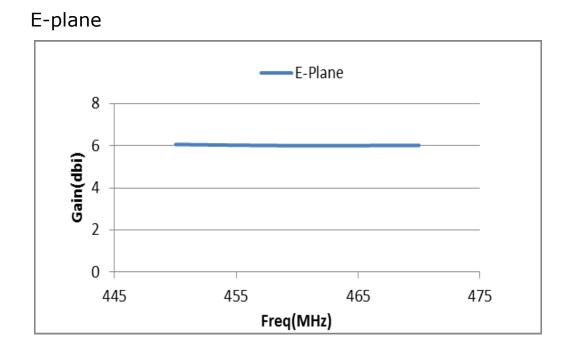
## **3. Antenna Characteristics**

### **3.1 VSWR**

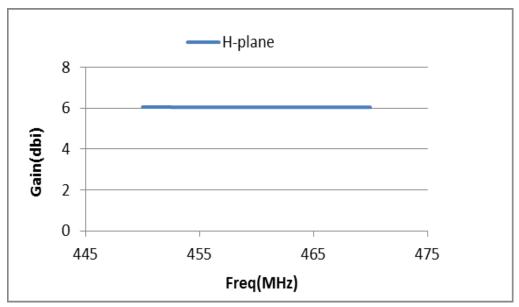




#### 3.2 Peak Gain





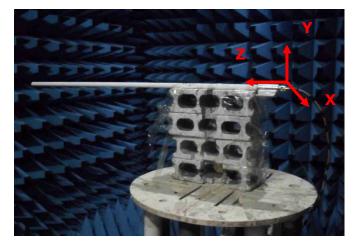




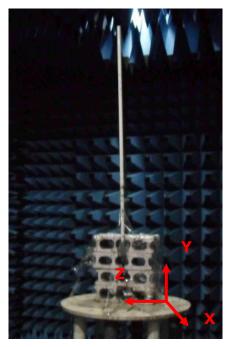
### **4.Antenna Radiation Pattern**

#### **4.1 Measurement Setup**

Vertical Pattern – E plane



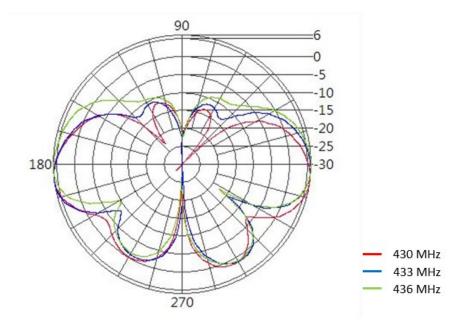
Horizontal Pattern – H plane



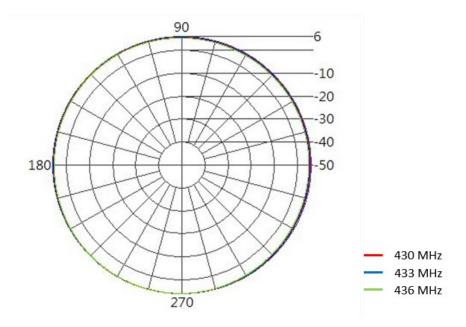


### 4.2 2D Radiation Pattern

#### Vertical Pattern – E plane

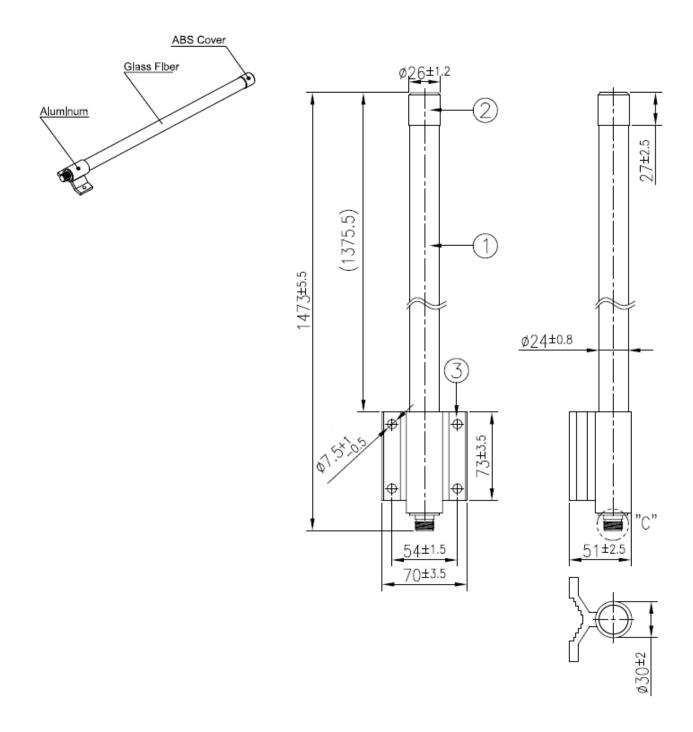


Horizontal Pattern – H plane

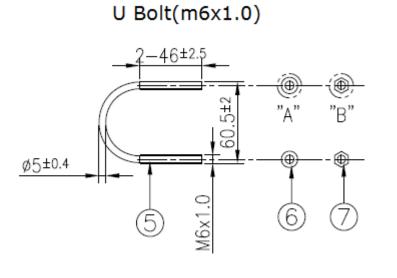




## 5. Mechanical Drawing (Unit: mm)

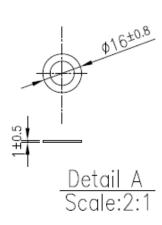


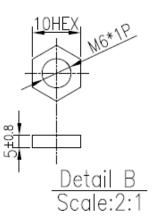




N Type(F)







Nut

	Name	P/N	Material	Finish	QTY
1	OMB.450 Antenna	001215A010021A	Fiberglass	White	1
2	Cover	000111K000021A	ABS	Sliver	1
3	Bracket	000312B000021A	Aluminum	Silver	1
4	N Type(F)	201211K000021A	Brass	Ni Plated	1
5	M6 U Bolt	000412B000021A	Stainless Steel	Sliver	2
6	M6 Washer	000411K010021A	Stainless Steel	Silver	4
7	M6 Nut	000411K020021A	Stainless Steel	Sliver	4



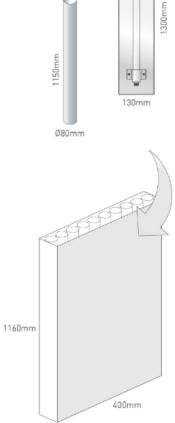
### 6. Packaging

#### OMB.450.B06F21

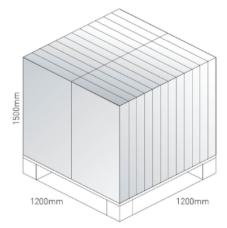
#### **Packaging Specifications**

1 OMB.450.B06F21 per PE Bag Bag Dimensions 130mm\*1300mm 1 PE Bag per Tube Tube Dimensions - Ø80mm\*Height 1150mm Total Weight - 1.2Kg

10 tubes per carton Carton Dimensions - 1160\*400\*180mm Weight - 13.2Kg



180mm



Pallet dimensions 1200\*1200\*1500mm 24 Cartons per pallet