

SPECIFICATION

Part No.	: OMB.450.B03F21
Description	: Barracuda - 3dBi 450MHz-470MHz LTE Band 31/ CDMA /ISM Omni Directional Outdoor Antenna with N Type Female Connector, U-Bolt, 523mm Length
Features	: Omni-Directional Radiation Pattern Collinear 3dBi Peak gain Fiberglass Housing Robust design for all weather operation IP65 waterproof Length: 523mm, Weight: 350g N Type Female connector Wall/Pole Mount bracket included RoHS compliant



1. Introduction

The OMB.450.B03F21 is a 3dBi 450MHz~470MHz LTE Band 31 / CDMA/ ISM band fiberglass omni-directional outdoor antenna. The antenna is designed for LTE and other CDMA and ISM applications such as metering, industrial / environmental monitoring, remote asset monitoring and mesh network applications.

The omni-directional antenna radiates uniformly in the azimuth. The collinear dipole array design minimizes losses and provides the best performance because the antenna gives maximum coverage 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/device surface via the N-type connector.

A higher gain 6dBi model is also available, the OMB.450.B06F21.

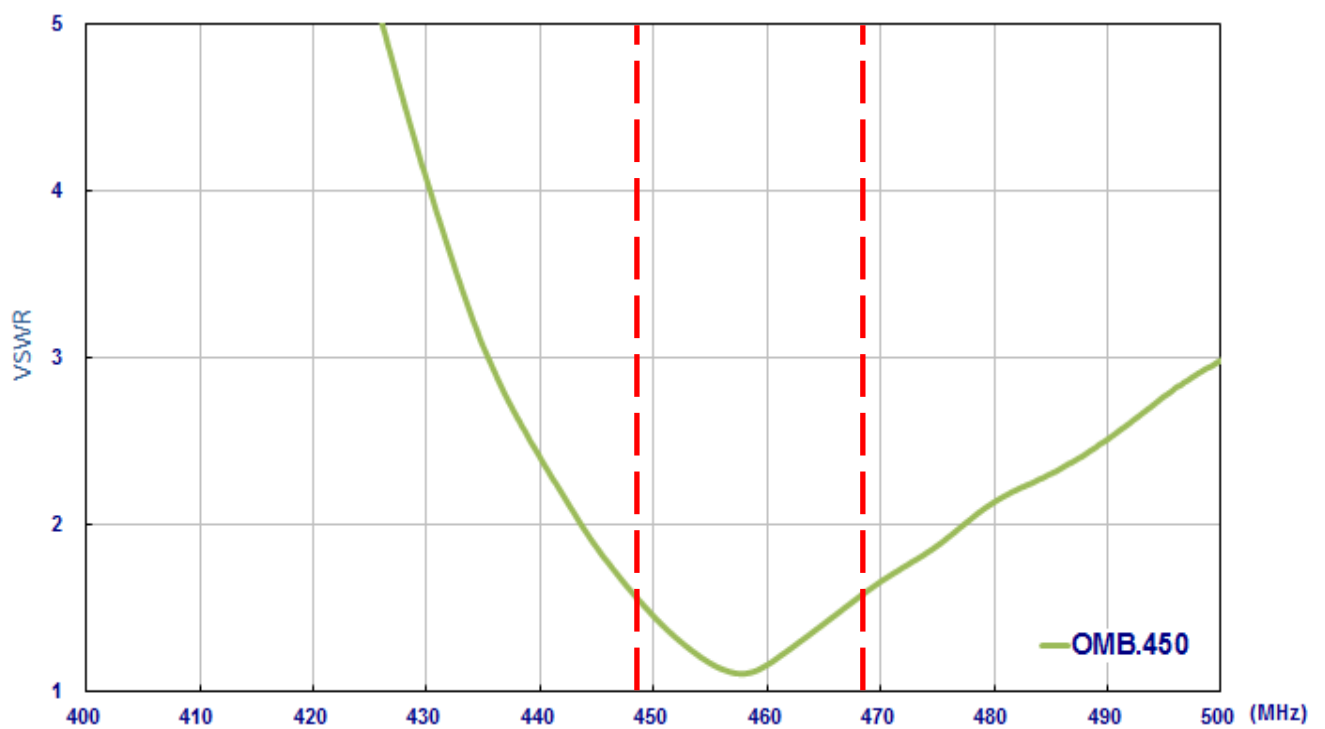
2. Specification

ELECTRICAL	
Standard	CDMA 450
Band	450 ~ 470 MHz
Antenna Type	Collinear Dipole Array
Peak Gain	3 dBi
Polarization	Vertical
Impedance	50 ohms
Max Input Power	100 watts
VSWR	1.5:1
Radiation	Omni-Directional
Vertical Beamwidth	67 Deg
Horizontal Beamwidth	360 Deg
Internal Material	Copper
Connector	N Type Female
MECHANICAL	
Length	523 mm
Radome Diameter	24mm
Bracket Dimension	70 x 73mm
Antenna Weight	350g
Mounting Accessories Weight	70g
Application	Indoor/Outdoor
Radome Material	White Fiberglass
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

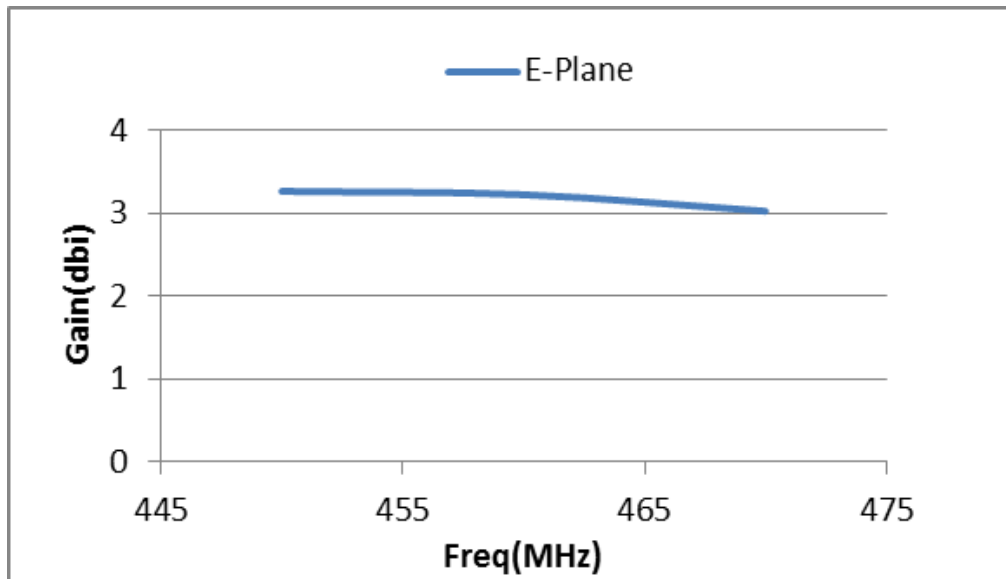
3. Antenna Characteristics

3.1 VSWR

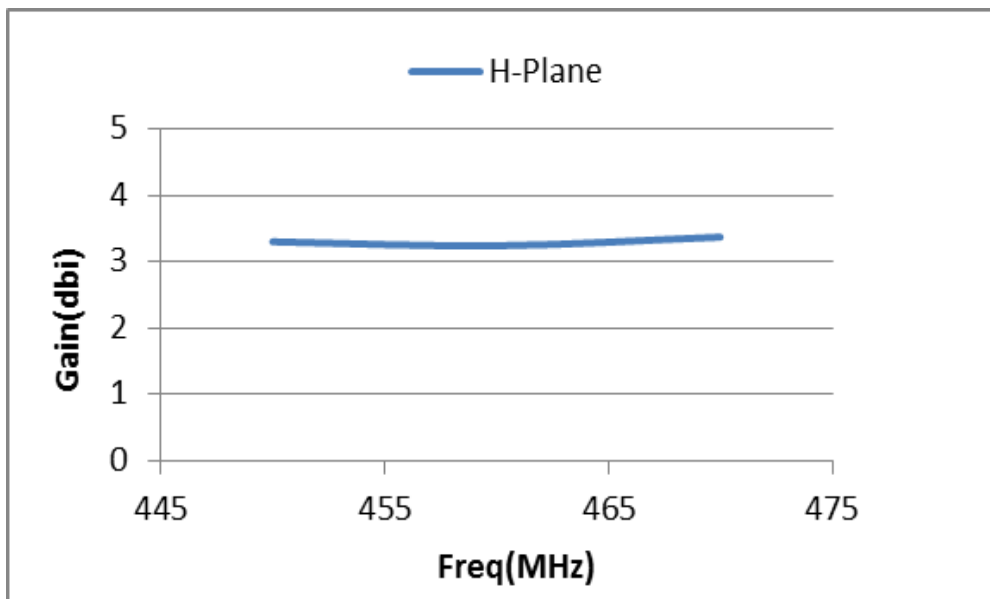


3.2 Peak Gain

E-plane



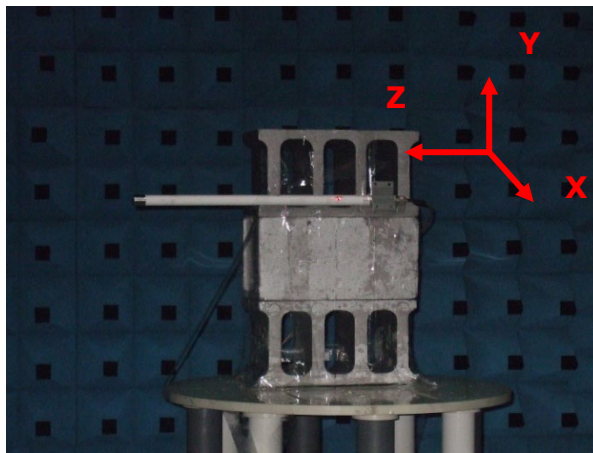
H-plane



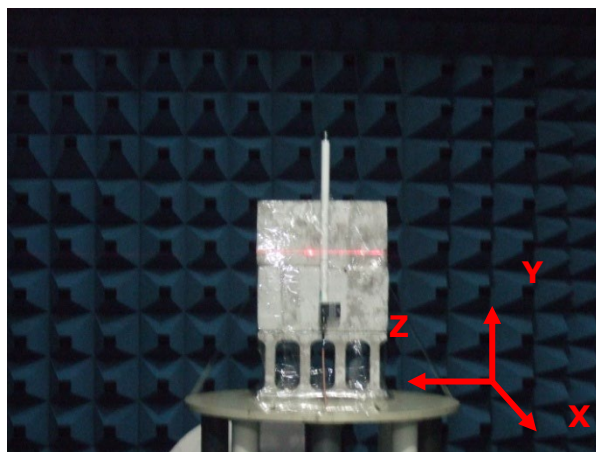
4. Antenna Radiation Pattern

4.1 Measurement Setup

Vertical Pattern – E plane

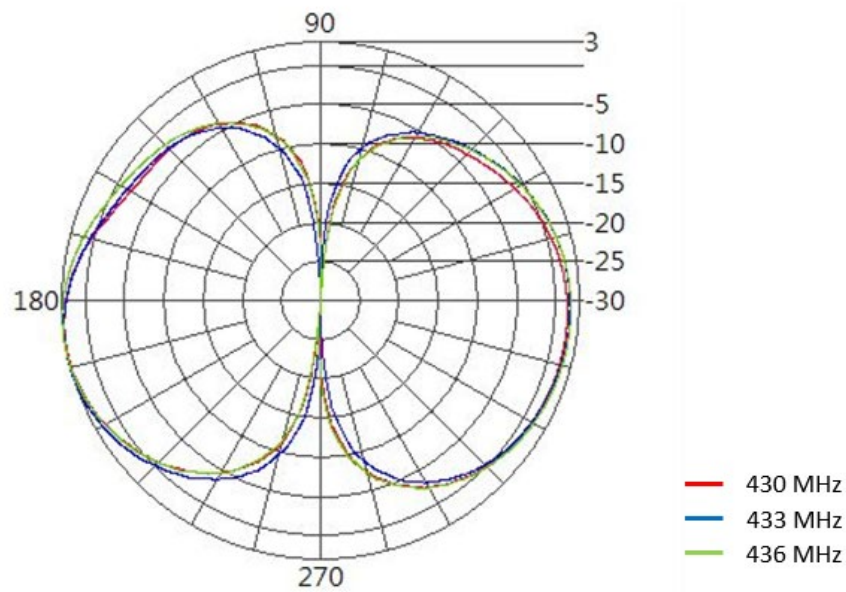


Horizontal Pattern – H plane

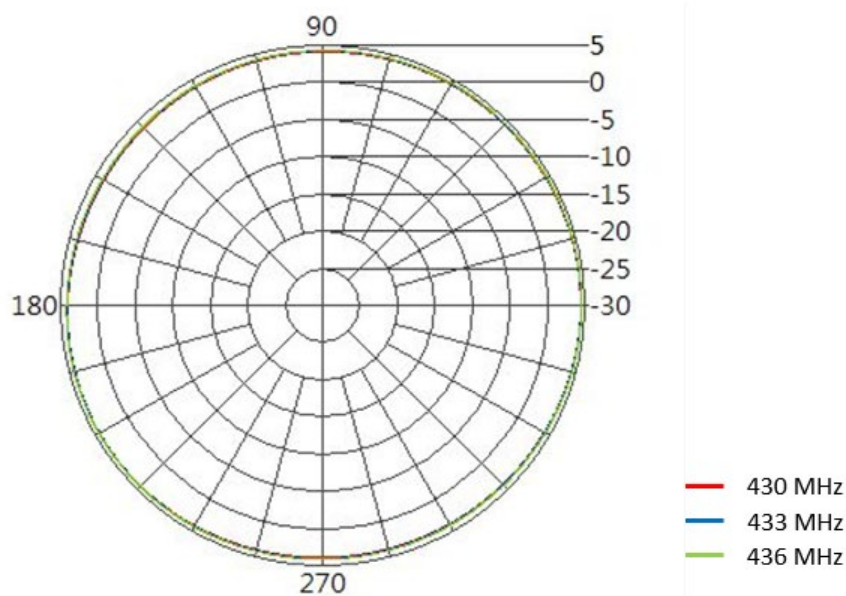


4.2 2D Radiation Pattern

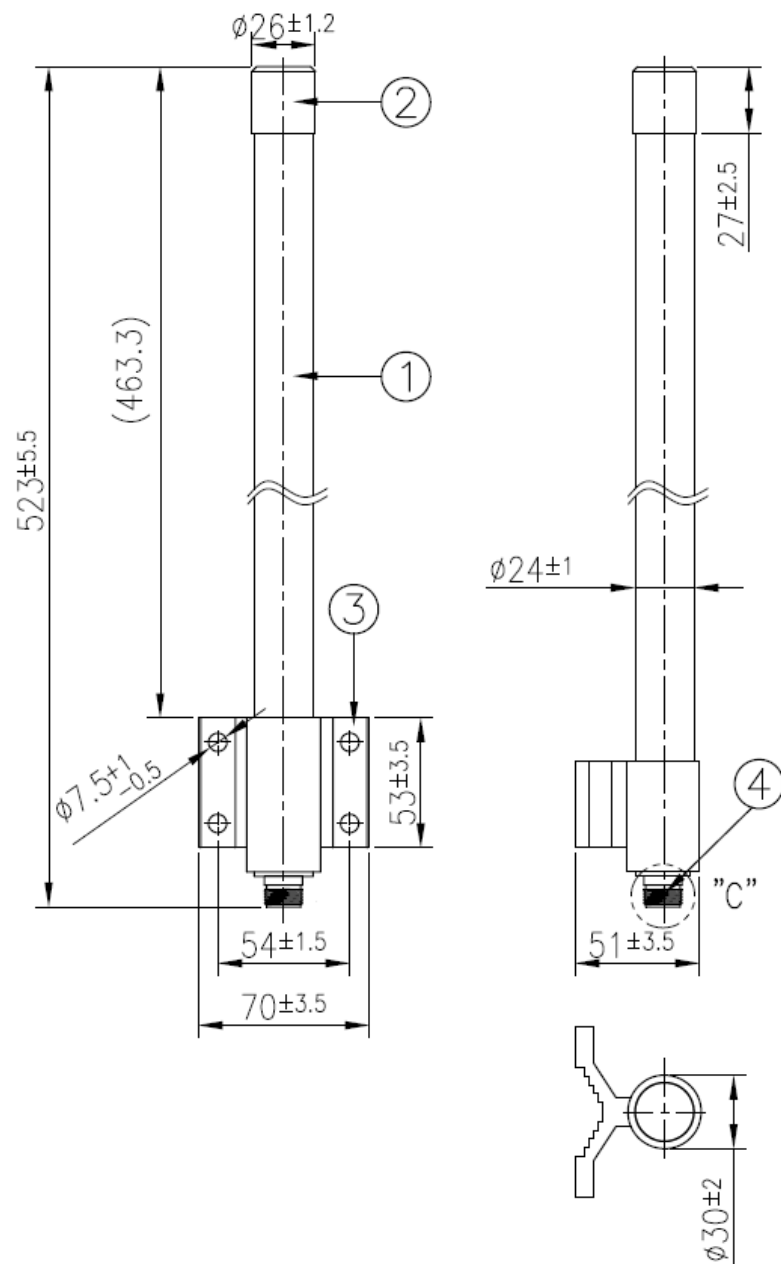
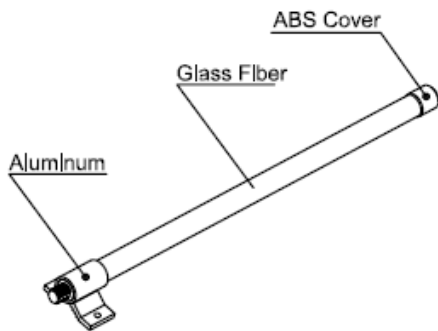
Vertical Pattern – E plane



Horizontal Pattern – H plane



5. Mechanical Drawing (Unit: mm)

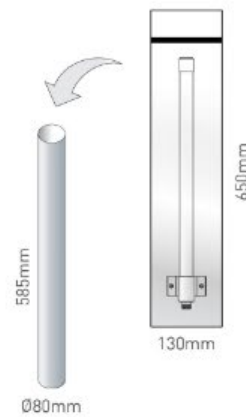


6. Packaging

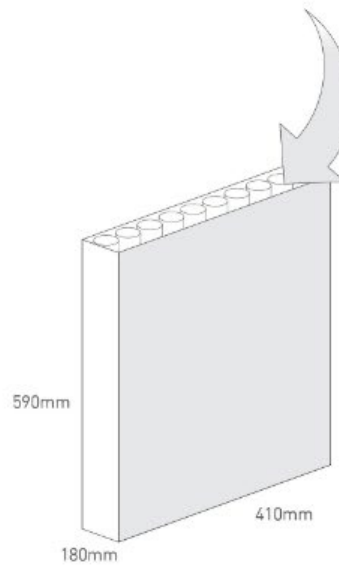
OMB.450.B03F21

Packaging Specifications

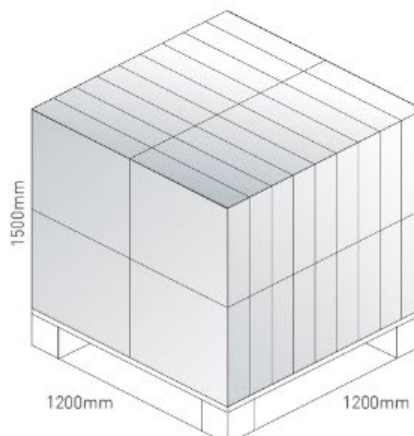
1 OMB.450.B03F21 per PE Bag
 Bag Dimensions 130mm*650mm
 1 PE Bag per Tube
 Tube Dimensions - Ø80mm*Height 580mm
 Total Weight - 750g



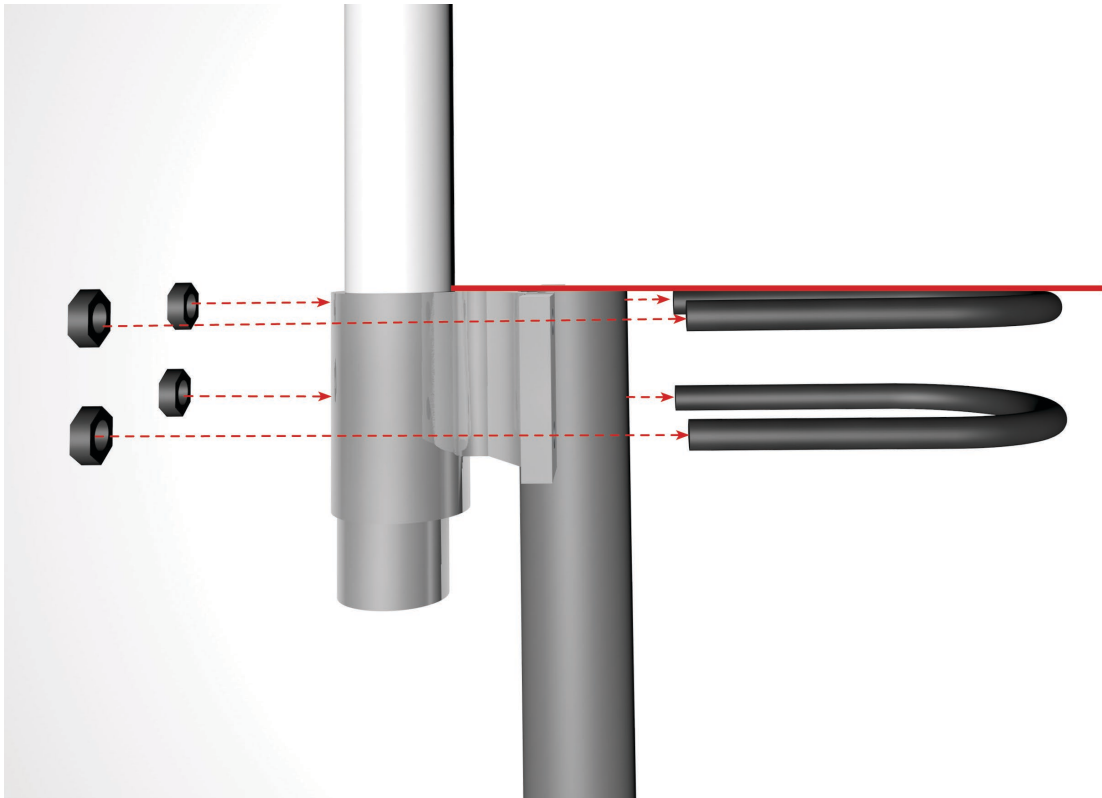
10 tubes per carton
 Carton Dimensions - 590*410*180mm
 Weight - 7.2Kg



Pallet dimensions 1200*1200*1410mm
 40 Cartons per pallet



7. Antenna Installation Guide



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