


# 2J6506BG 2J6506MG (DATASHEET)

<b>Type</b>	Combined antenna
<b>Frequencies</b>	AMPS (824-894 MHz) GSM (900 MHz) DCS (1800 MHz) PCS (1900 MHz) 3G (UMTS 2.1 GHz)  GPS/GLONASS (1572-1610 MHz)
<b>Mounting</b>	WIFI / BLUETOOTH (2.4 GHz) B-Body Mount M-Magnetic Mount
<b>Revision</b>	00



  
P. Tipul



## 1. SPECIFICATION

### 1.1. Electrical Specifications

#### Mobile (Cable 1)

Frequencies	AMPS (824-894 MHz) GSM (900 MHz) DCS (1800 MHz) PCS (1900 MHz) 3G (UMTS 2.1 GHz)
Impedance	50 Ohms
Noise figure	1.15dB
Polarization	Horizontal
Gain	6dBi
VSWR*	<4:1
Power handling	50W

#### Navigation (Cable 2)

Frequencies	GPS/GLONASS (1572-1610 MHz)
Impedance	50 Ohms
Noise figure	1.15dB
Polarization	RHCP
Patch Gain	3-5dBiC min. at zenith
LNA Gain	GNSS: 23dB at 3V, 24dB at 5V
Voltage supply	2.7V - 5.5V
Current	15mA - 25mA
Power (max.)	138mW

#### Wifi (Cable 3)

Frequencies	WIFI / BLUETOOTH (2.4 GHz)
Impedance	50 Ohms
Polarization	Vertical
Gain	5dBi Max
VSWR*	<2:1
Power handling	50W

#### Enviromental

Operating temperature	40°C to +85°C
Certificates	IP67, IP69K, IK09

\*Values stated when measured on 20x20cm ground plane with 1cm cable length

## 1.2. Connection Specifications

Cable 1 (Mobile):  
Connector type: SMA male  
Cable: RG58  
Cable length: 1 m

Cable 2 (Navigation):  
Connector type: SMA male  
Cable: RG174U  
Cable length: 1 m

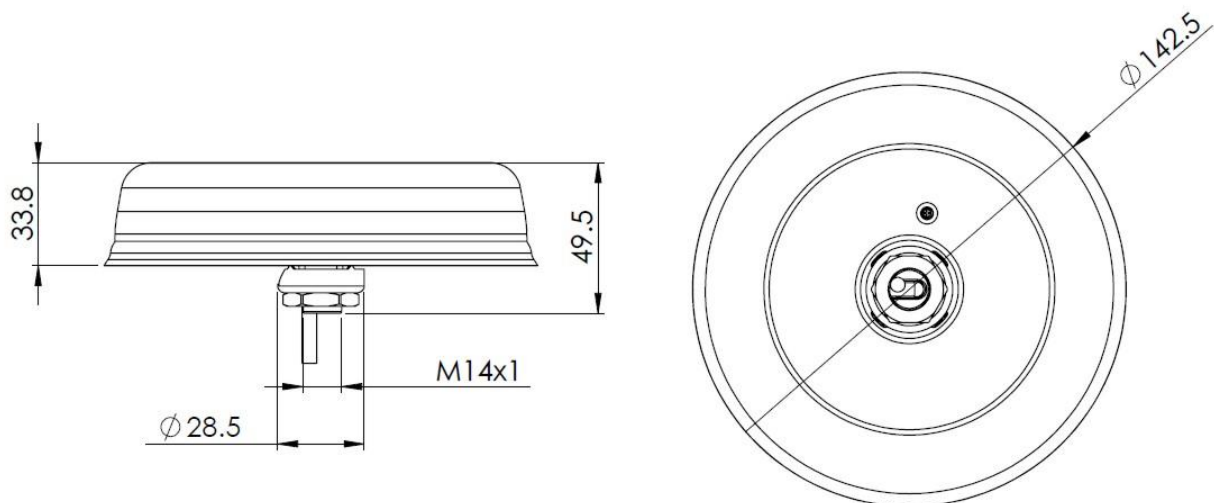
Cable 3 (Wifi):  
Connector type: SMA male  
Cable: RG174U  
Cable length: 1 m

For different cable length and connector type ask our sales team.

## 1.3. Mechanical Specifications and Dimensions

### 1.3.1. 2J6506BG

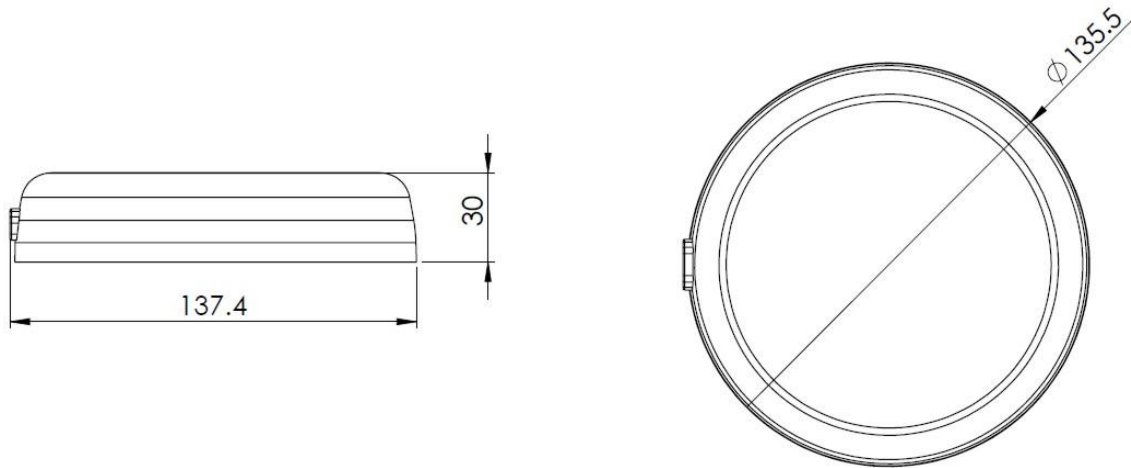
Material: Lid: ABS / Base: Zamak / Gasket: TPE  
Max. dimensions: 146mm x 32mm (when placed on ground-plane)  
Colour: Black/ Green/ White (for different colours please ask our sales team)



### 1.3.2. 2J6506MG

Material:  
Max. dimensions:  
Colour:

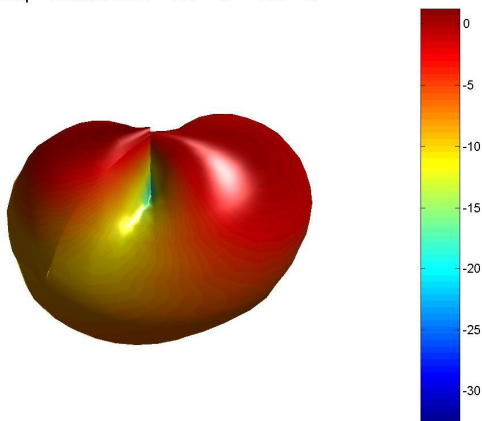
Lid: ABS / Base: Zamak  
135.5mm x 30mm (when placed on ground-plane)  
Black/ Green/ White (for different colours please ask our sales team)



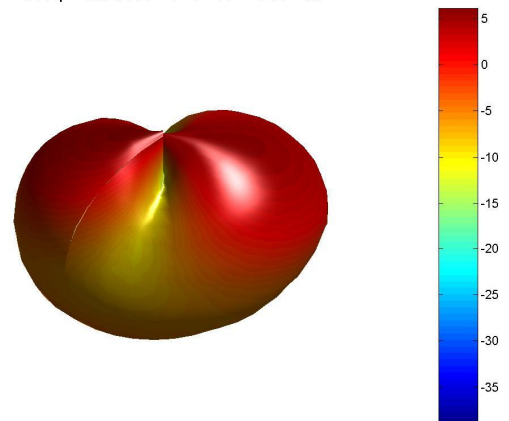
## 2. MEASUREMENT

### 2.1. GSM

850MHz  
Freq = 0.8500GHz Az= 45 EL= 45

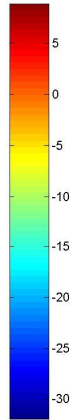
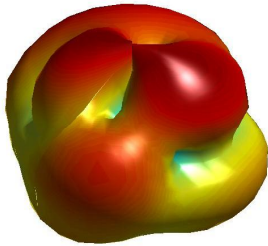


900MHz  
Freq = 0.9GHz Az= 45 EL= 45



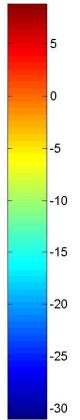
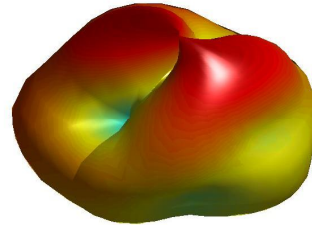
### 1800MHz

Freq = 1.8GHz Az= 45 EL= 45



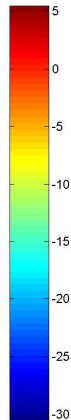
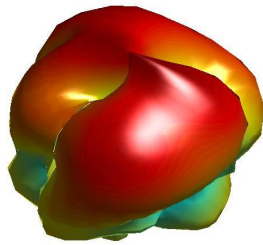
### 1900MHz

Freq = 1.9GHz Az= 45 EL= 45

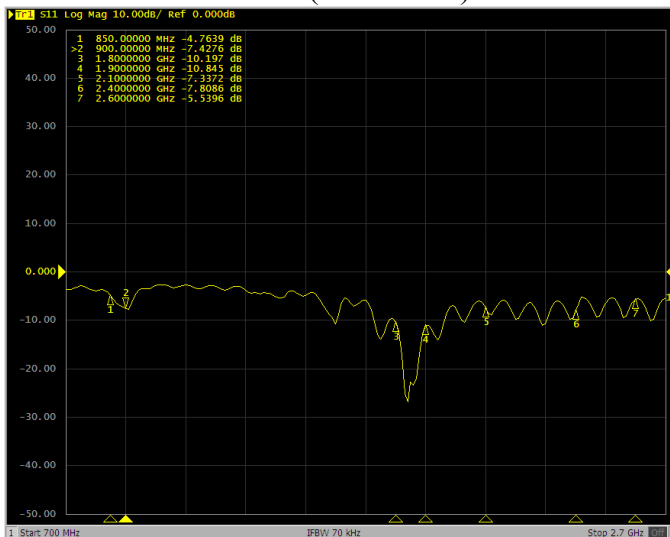


### 2100MHz

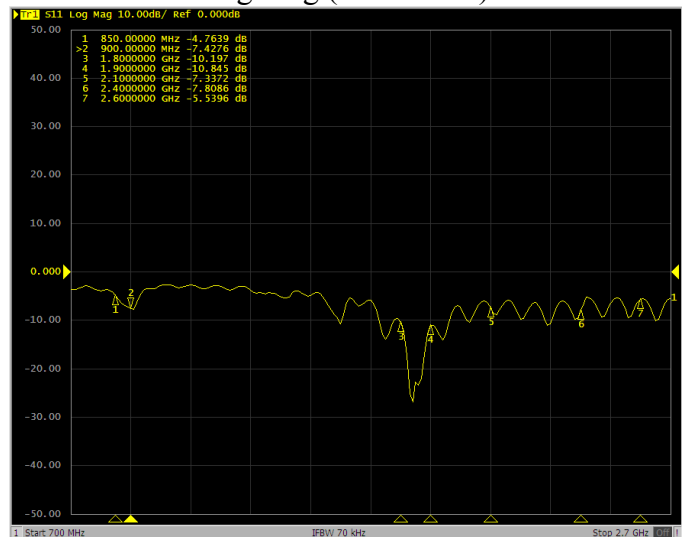
Freq = 2.1GHz Az= 45 EL= 45



### VSWR (Penta band)

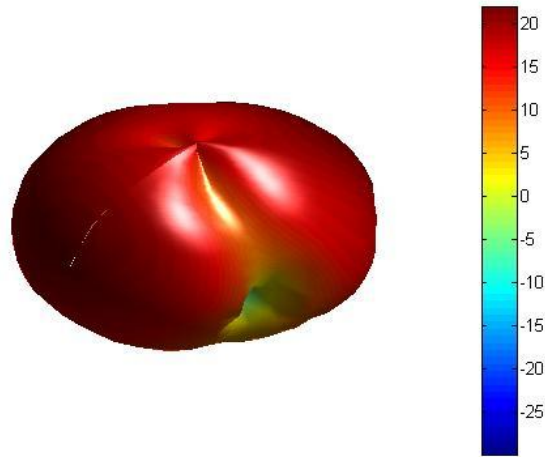


### Log Mag (Penta band)

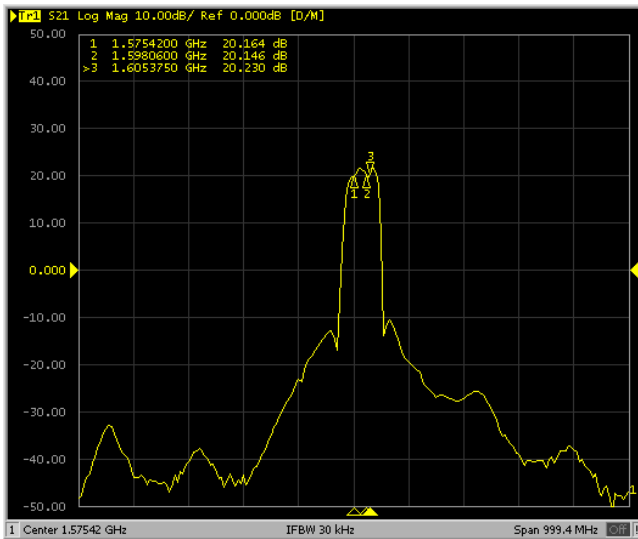


## 2.2. GNSS:

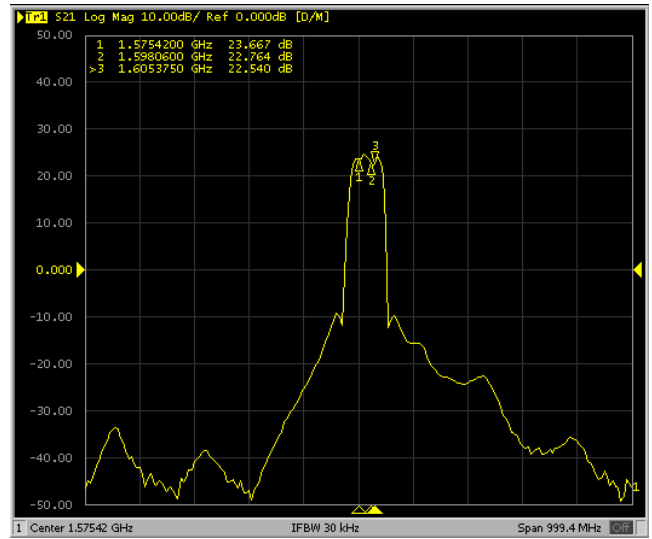
Freq = 1.5754GHz Az= 45 EL= 45



Gain at 3V

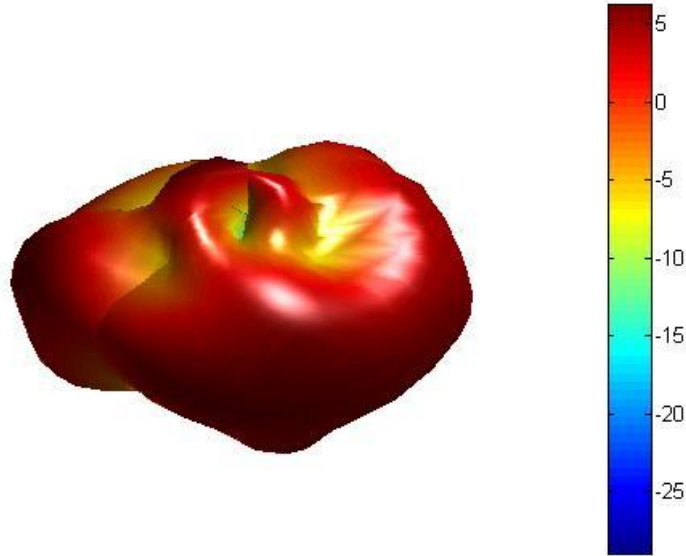


Gain at 5V



### 2.3. WiFi:

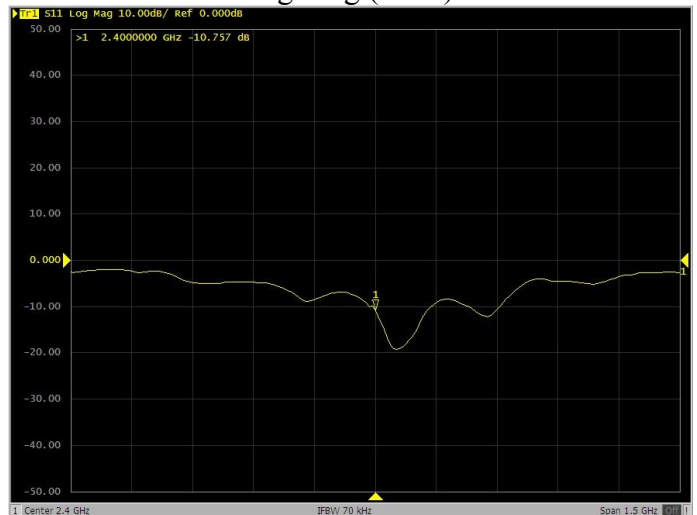
Freq = 2.4GHz Az= 45 EL= 45



VSWR (WiFi)



Log Mag (WiFi)



### 3. IMAGES

