

2J660B 2J660BG

(Datasheet)

Type
Frequencies

Combined antenna
AMPS (850 MHz)
GSM (900 MHz)
GPS/GLONASS (1572 – 1610 MHz)
DCS (1800 MHz)
PCS (1900 MHz)
3G (UMTS 2.1 GHz)
WIFI / BLUETOOTH (2.4 GHz)

Mounting
Revision

Body Mount
01




P. Tipul



1. PRODUCT SELECTOR

2J660B GPS L1 version
2J660BG GPS/GLONASS version

2. SPECIFICATION

2.1. *Electrical Specifications*

Mobile (Cable 1)

Frequencies	AMPS (850 MHz) GSM (900 MHz) DCS (1800 MHz) PCS (1900 MHz) 3G (UMTS 2.1 GHz) WIFI / BLUETOOTH (2.4 GHz)
Impedance	50 Ohms
Polarization	Linear
Gain	2.2 dBi Max
VSWR	<2:1
Power handling	50W
Operating temperature	-40°C to +85°C

Navigation (Cable2)

	2J660B	2J660BG
Frequencies	GPS (1575.42 MHz)	GPS (1575.42 MHz) GLONASS (1592 - 1610 MHz)
Impedance	50 Ohms	
Polarization	RHCP	
LNA Gain	26dB at 3V, 27dB at 5V	
VSWR	<1.2:1	
Voltage supply	2.7V - 5.5V	
Current	15mA - 25mA	
Power (max.)	138mW	
Operating temperature	-40°C to +85°C	

2.2. *Connection Specifications*

Cable 1 (Mobile):

Connector type: FME female
Cable: RG174U
Cable length: 250 cm

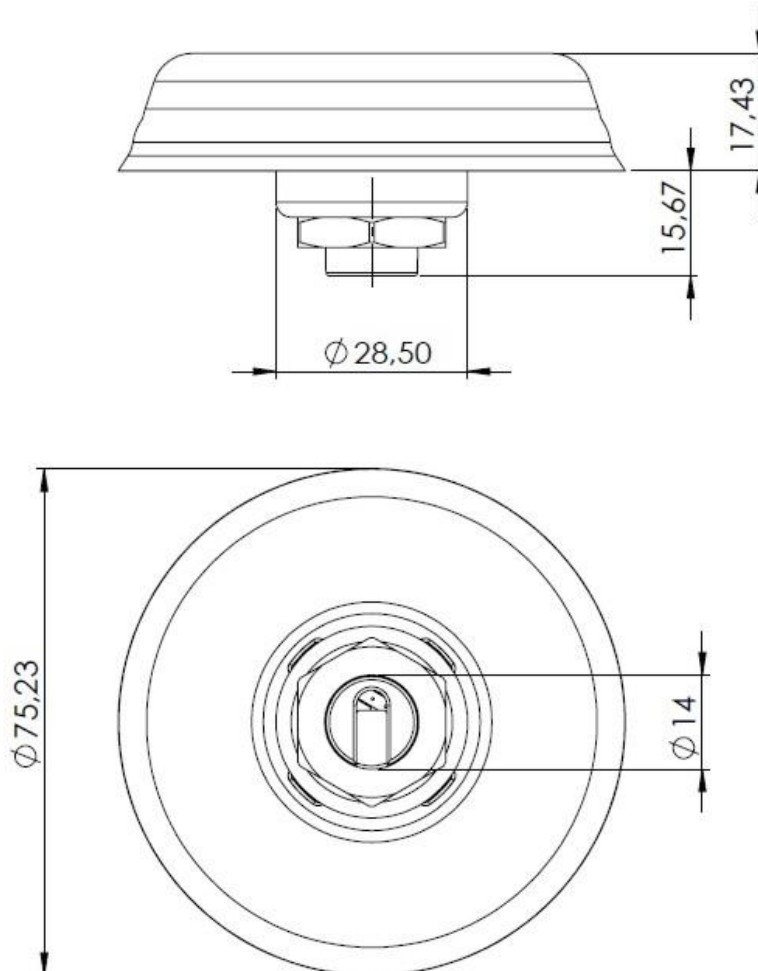
Cable 2 (Navigation):

Connector type: SMA male
Cable: RG174U
Cable length: 250 cm

For different cable or connector type please our sales team.

2.3. Mechanical Specifications and Dimensions

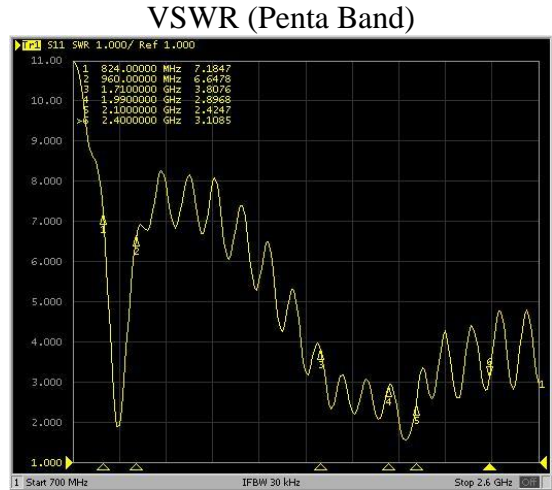
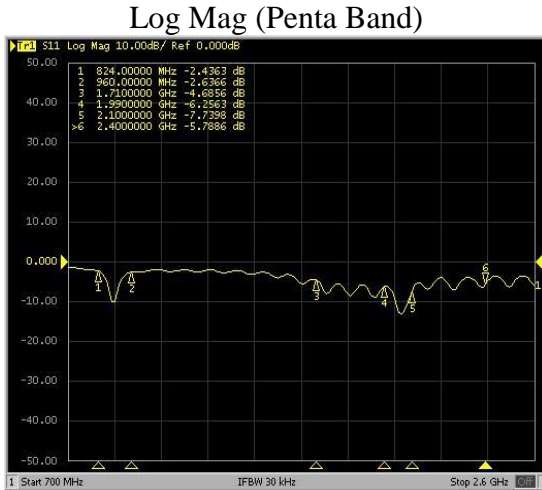
Material:	Lid: ABS / Base: Zamak / Gasket: TPE
Dimensions:	75.23 mm x 17.43 mm
Weight:	200 g 'weight with connection above'
Colour:	Black (for different colours please ask our sales team)



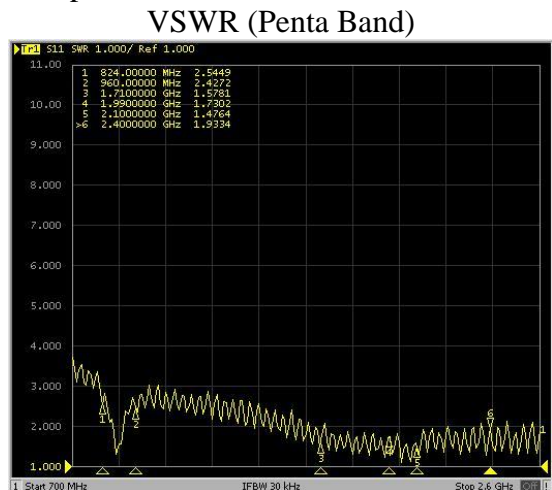
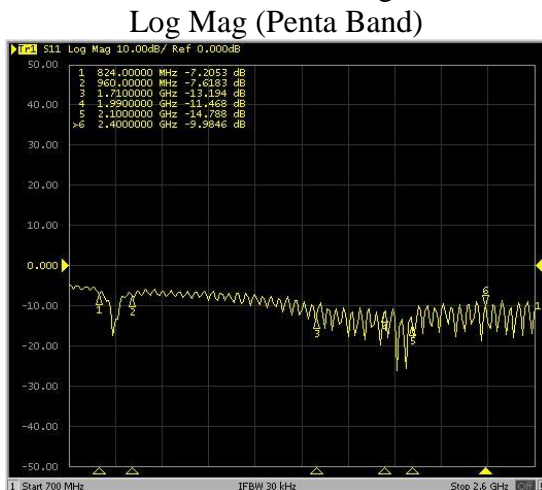
3. MEASUREMENT

3.1. S11

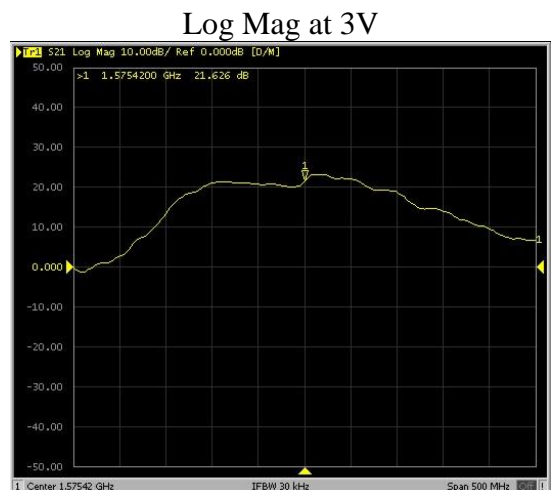
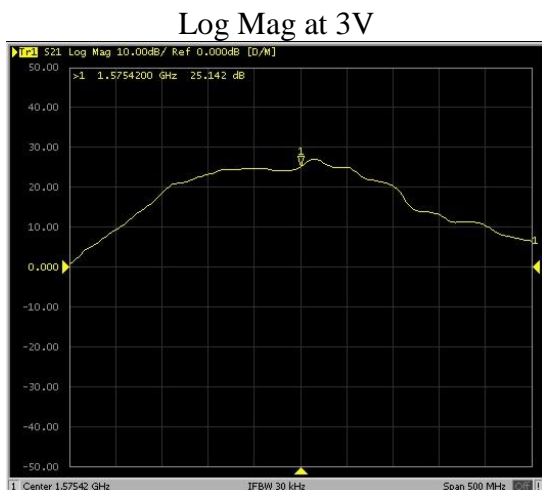
- Tested with 50cm cable length on 50 cm x 50 cm ground plane.



- Tested with 2.5m cable length on 50 cm x 50 cm ground plane.



GNSS:



Tested with 2.5m cable length - RG174 with C20N

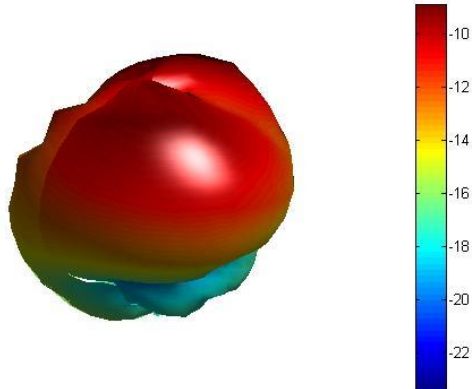
Tested with 5m cable length - RG174 with C20N

3.2. 3D radiation pattern

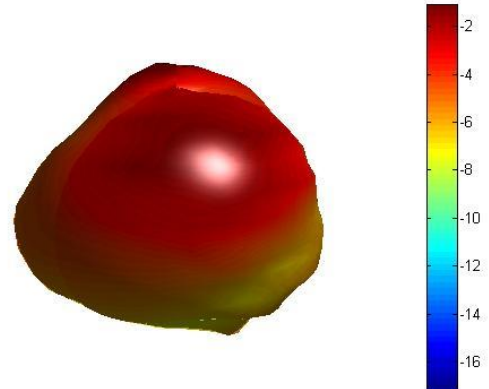
3.2.1. GSM

- Tested with 30cm cable length on 25 cm x 25 cm ground plane.

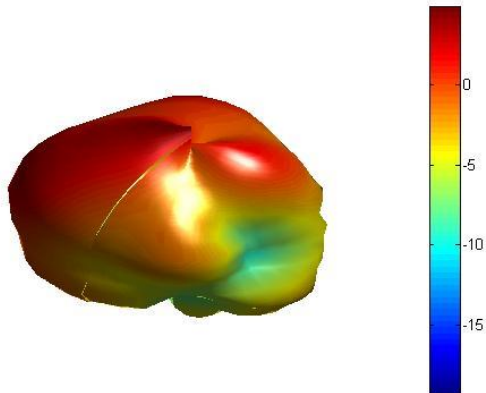
850MHz
Freq = 0.8500GHz Az= 45 EL= 20



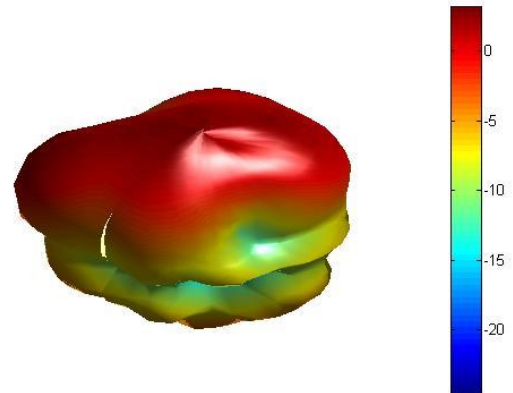
900MHz
Freq = 0.9GHz Az= 45 EL= 20



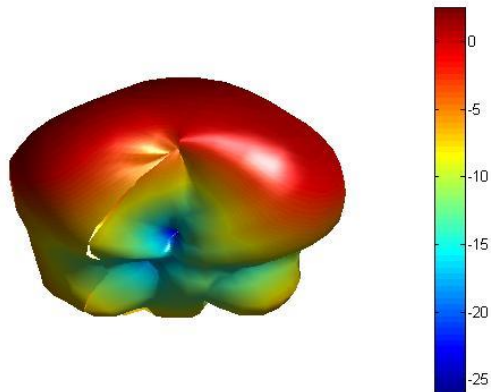
1800MHz
Freq = 1.8GHz Az= 45 EL= 45



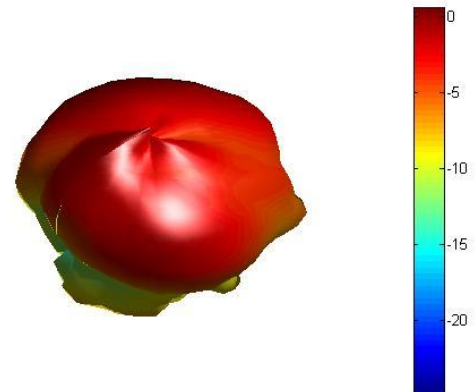
1900MHz
Freq = 1.9GHz Az= 45 EL= 45



2100MHz
Freq = 2.1GHz Az= 45 EL= 45



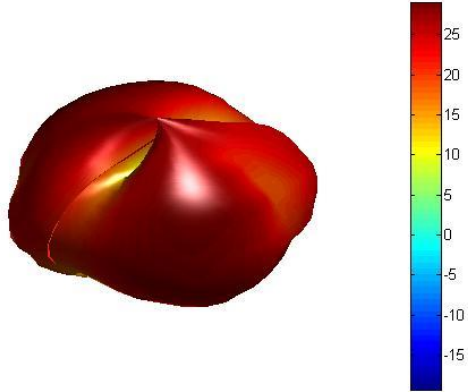
2400MHz
Freq = 2.4GHz Az= 45 EL= 45



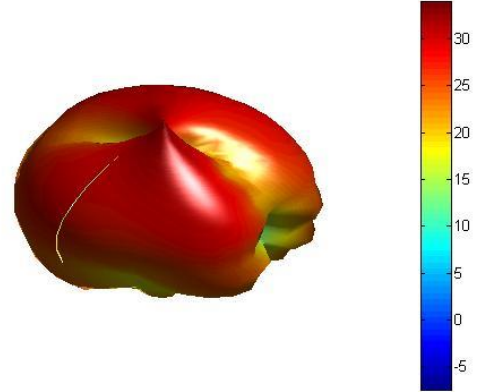
3.2.2. GNSS

- Tested with 30cm cable length on 25 cm x 25 cm ground plane and 5V power supply.

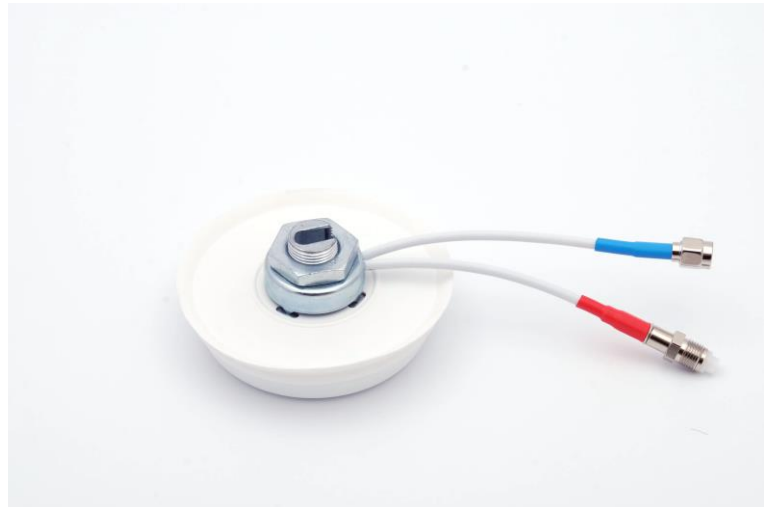
1575.42MHz
Freq = 1.5754GHz Az= 45 EL= 45



1610MHz
Freq = 1.6104GHz Az= 45 EL= 45



4. IMAGES





5. REVISION LEGEND

Revision	Description	Approved By
00	Initial version	
01	Added 3D radiation patterns	Tipul, Noble