

2J4441P 2J4441GP 2J4441RP 2J4441RGP (DATASHEET)

| | |
|--------------------|--------------------------------|
| Type | LTE/GNSS Combined antenna |
| Frequencies | 4G/LTE (699-960/1710-2690 MHz) |
| | GPS (1575.42 MHz) |
| | GALILEO E1 (1575.42 MHz) |
| | GLONASS (1592 - 1610 MHz) |
| Mounting | Glass Mount |
| Revision | 00 |



1. PRODUCT SELECTOR

| | |
|------------------|---|
| 2J4441P | LTE without diagnostic resistor and with GPS module |
| 2J4441GP | LTE without diagnostic resistor and with GPS+Glonass module |
| 2J4441RP | LTE with diagnostic resistor and with GPS module |
| 2J4441RGP | LTE with diagnostic resistor and with GPS+Glonass module |

2. SPECIFICATION

2.1. Electrical Specifications

Mobile (Cable 1)

| | |
|----------------|--------------------------------|
| Frequencies | 4G/LTE (699-960/1710-2690 MHz) |
| Impedance | 50 Ohms |
| Polarization | Horizontal |
| Gain | 2 dBi typ. |
| VSWR | <4:1 |
| Power handling | 35W |
| Note* | 10k detection resistor |

*Antenna with diagnostic resistor

Navigation (Cable 2)

| | |
|----------------|--|
| Frequencies | GPS (1575.42 MHz) GALILEO E1 (1575.42 MHz) GLONASS (1592 - 1610 MHz) |
| Impedance | 50 Ohms |
| Noise figure | 1.2 dB typ. |
| Polarization | RHCP |
| LNA Gain | 23dB at 3V; 24dB at 5V |
| Voltage supply | 2.7 V - 5.5 V |
| Current | 15mA - 25 mA |
| Power (max.) | 138 mW max. |

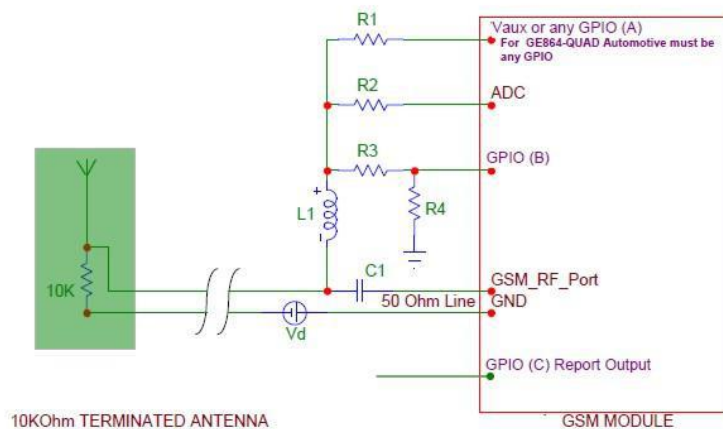
2.2. General Specifications

| | |
|-----------------------|----------------|
| IP rating | IP67 |
| Operating temperature | -40°C to +85°C |

2.3. Connection Specifications

Cable 1 (Mobile):

Connector type: SMA male
Cable: RG174U
Cable length: 30 cm



LTE Antenna with diagnostic resistor is terminated with 10k Ohm resistor what can be used in application where you need check antenna presence. On the picture above you can see example of connecting antenna into that circuit. With this application you can check if antenna is connected or not or if on antenna is shorted.

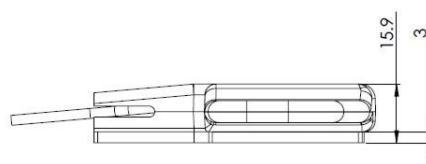
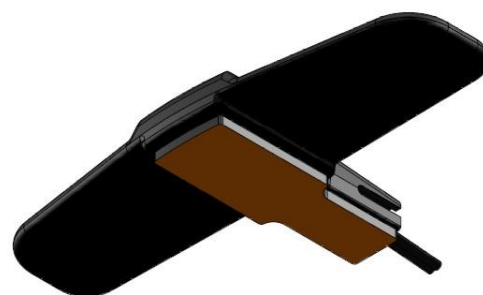
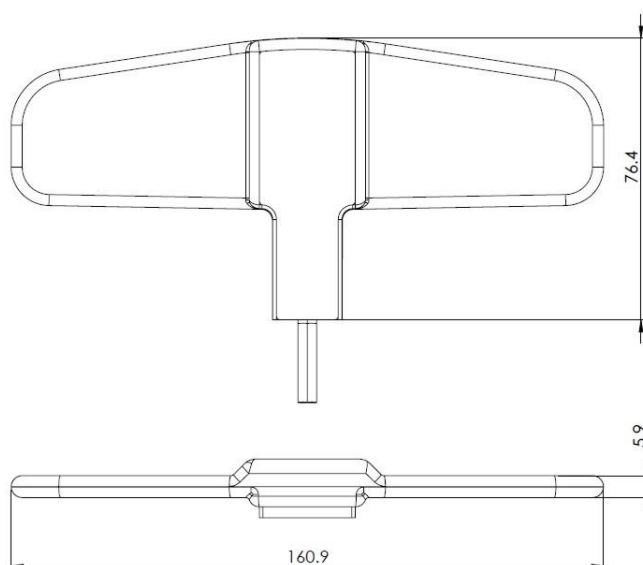
Cable 2 (Navigation):

Connector type: SMA male
Cable: RG174U
Cable length: 30 cm

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

2.4. Mechanical Specifications and Dimensions

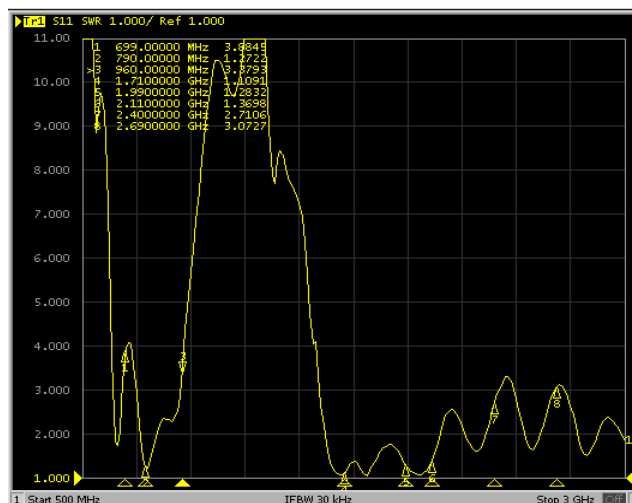
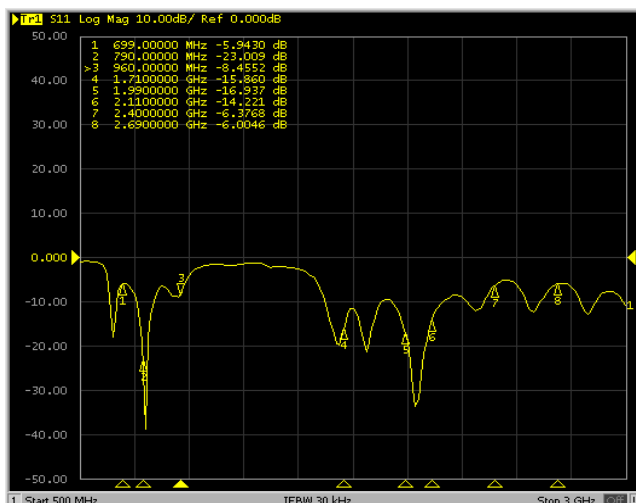
| | |
|------------------|---|
| Material: | ABS |
| Max. dimensions: | 76.4mm x 15.9mm x 160.9mm (L x T x W) |
| Weight: | 190 g 'weight counted with connection above' |
| Colour: | Black (for different colours please ask our sales team) |



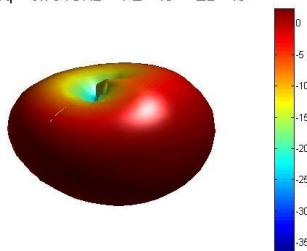
3. MEASUREMENT

- 30cm RG174 Coaxial Cable
- mounted on car glass

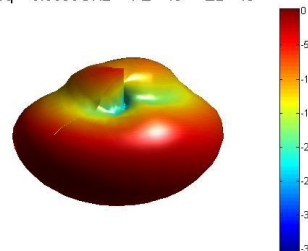
3.1. LTE



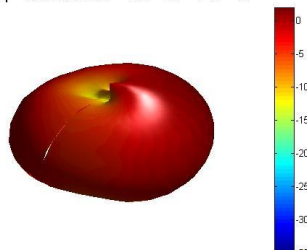
Freq = 0.754GHz Az= 45 EL= 45



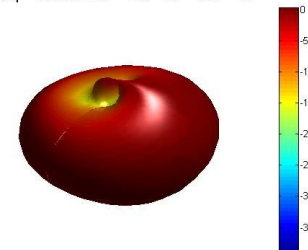
Freq = 0.8090GHz Az= 45 EL= 45



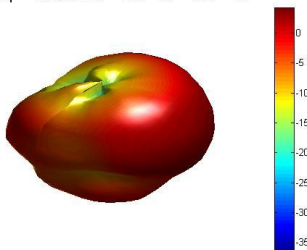
Freq = 0.8530GHz Az= 45 EL= 45



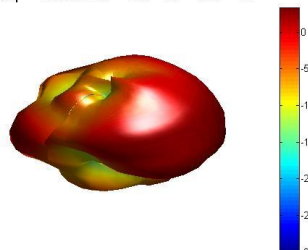
Freq = 0.897GHz Az= 45 EL= 45



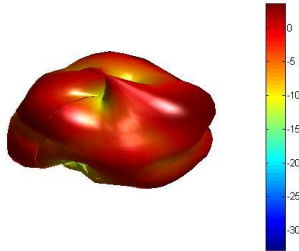
Freq = 1.799GHz Az= 45 EL= 45



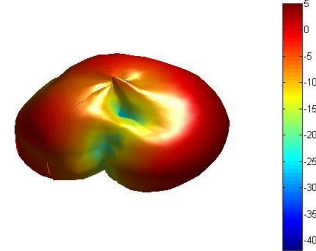
Freq = 1.898GHz Az= 45 EL= 45



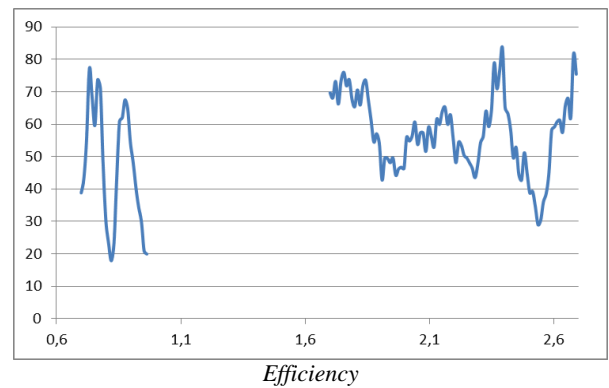
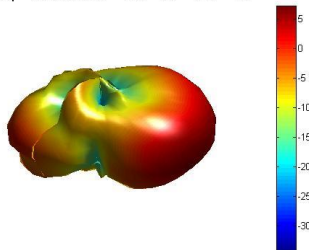
Freq = 2.107GHz Az= 45 EL= 45



Freq = 2.404GHz Az= 45 EL= 45

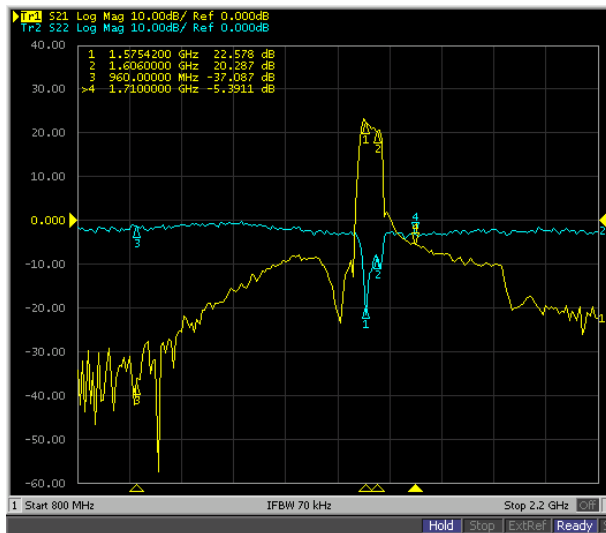


Freq = 2.602GHz Az= 45 EL= 45

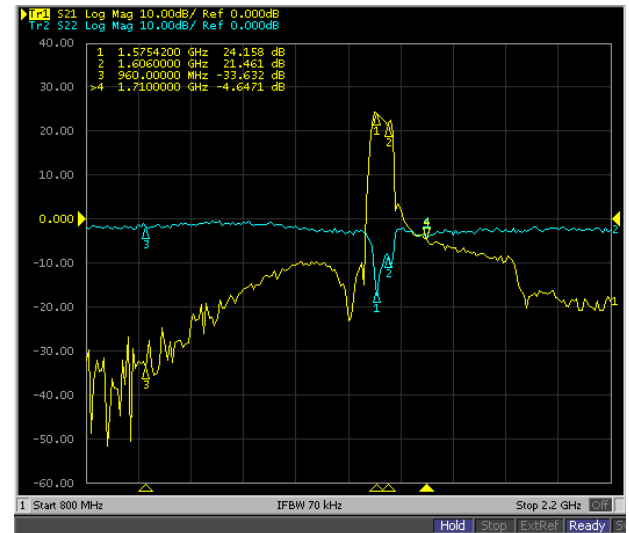


3.2. GNSS

• Filter + LNA



Yellow LNA+Filter S21; Blue LNA+Filter S22 (O/P) [3V]



Yellow LNA+Filter S21; Blue LNA+Filter S22 (O/P) [5V]