

# GPS/GLONASS+LTE Combination Antenna

Pulse Part Number SWM1660



## Features

- GPS-GLONASS-GALILEO - High gain LNA up to 30dB
- 4G LTE band – 698 MHz to 2690MHz Covers legacy worldwide 2G and 3G bands LTE/GSM/CDMA/PCS/DCS/UMTS/GPRS/EDGE/HSPA IP67
- Height 14.5mm Diameter 84.6mm
- RoHS Compliant

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## GPS-GLONASS-GALILEO Specification

| Item                |            |                     | Specifications  |
|---------------------|------------|---------------------|-----------------|
| GPS/GLONASS Antenna | Dielectric | Center Frequency    | 1575.42-1602MHz |
|                     | Antenna    | Polarization        | RHCP            |
|                     |            | Gain                | 2dBic (Zenith)  |
|                     |            | V.S.W.R             | <2.0            |
|                     |            | Impedence           | 50Ω             |
|                     |            | Axial Ratio         | 3dB (max)       |
|                     | LNA        | Gain                | 28±2dB          |
|                     |            | Noise Figure        | <1.5dB          |
|                     |            | V.S.W.R             | <2.0            |
|                     |            | Supply Voltage      | 2.2~5V DC       |
|                     |            | Current Consumption | <15mA           |

## LTE ANTENNA Specification

| Item        |            |                  | Specifications          |
|-------------|------------|------------------|-------------------------|
| LTE Antenna | Dielectric | Center Frequency | 698~960MHz/1710~2690MHz |
|             | Antenna    | Polarization     | Linear                  |
|             |            | Gain             | 2.5dBi                  |
|             |            | V.S.W.R          | <3.0                    |
|             |            | Impedence        | 50Ω                     |
|             |            |                  |                         |
|             |            |                  |                         |

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## MECHANICAL Specification

| Item       |                 | Specifications      |
|------------|-----------------|---------------------|
| Mechanical | Cable           | RG174               |
|            | Connector       | SMA/FAKRA or others |
|            | Material        | ABS                 |
|            | Mounting Method | Adhesive/Magnet     |
|            |                 |                     |

## LTE ANTENNA Specification

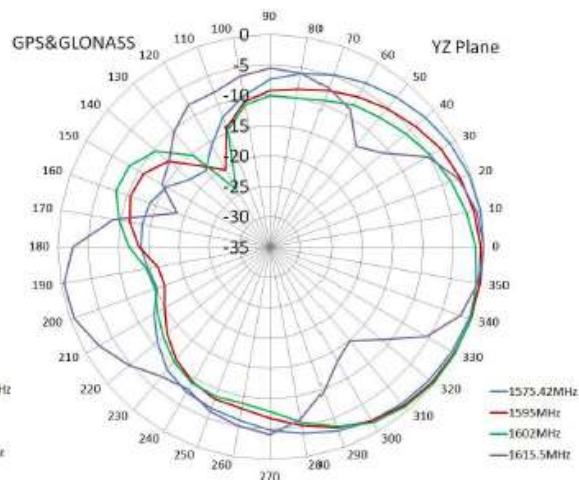
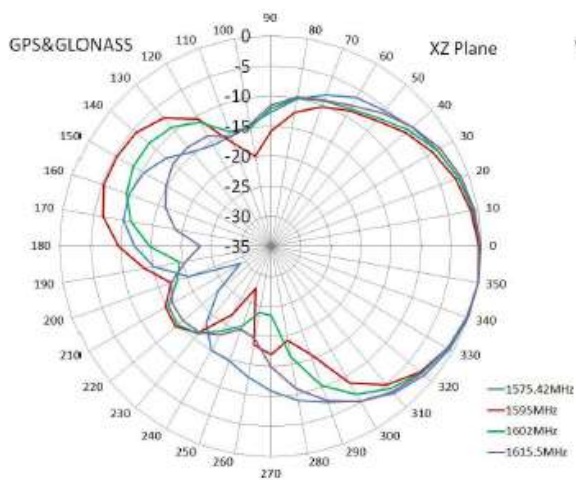
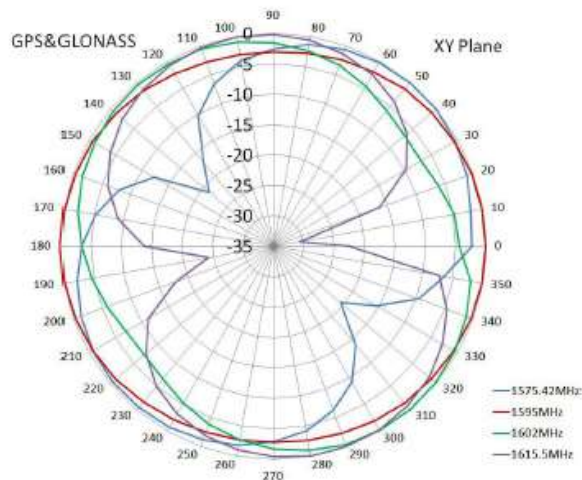
| Item          |                          | Specifications                            |
|---------------|--------------------------|-------------------------------------------|
| Environmental | Operating Temperature    | -40°C~+85°C                               |
|               | Relative Humidity        | Up to 95%                                 |
|               | V. Ingress Protection    | IP67                                      |
|               | Vibration                | 10 to 55Hz with 1.5mm amplitude<br>2hours |
|               | Environmentally Friendly | ROHS Compliant                            |

# GPS/GLONASS+LTE Combination Antenna

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## Typical Free Space Radiation Patterns

### GPS/GLONASS Antenna

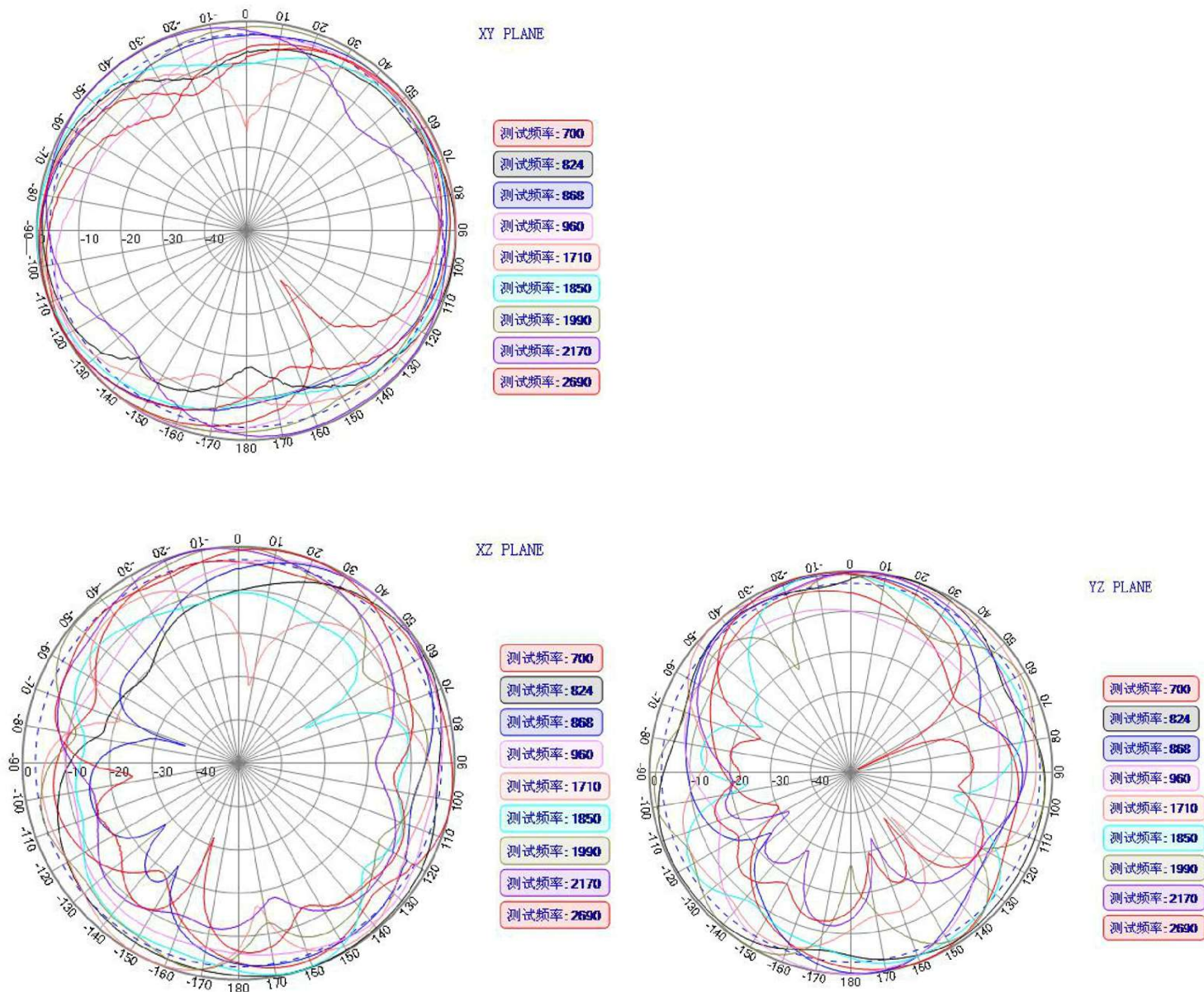


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## Typical Free Space Radiation Patterns

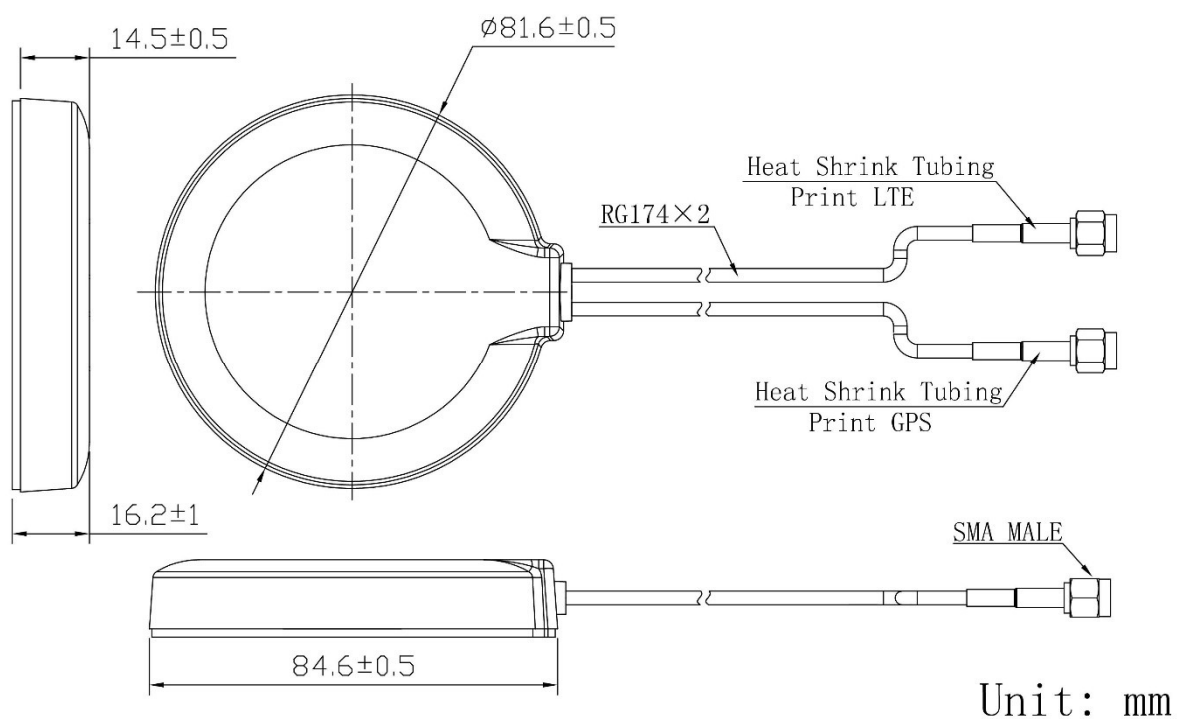
### LTE Antenna



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## Mechanical Drawing



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## Packing

- Put 1pc product in the poly bag, then add the info label.
- Align the finished goods into the tray.
- Cardboard sheet under and on the top of the tray stack in the tray stack. Every second tray must be rotated 180 degrees, binding of the stack-1 strap lengthwise and 2 strap crosswise.
- Add foam paper between two trays.
- First put down 1pc sheet board in box, then put binding tray in box, empty 1 pc on the top of the box.
- Binding of the carton: scaled with tape, 1 strap length wise and 2 strap crosswise.



### Label content:

P/N:  
Project Name:  
Inductance:

- P/N, e.g. SWA1400
- Project Name, e.g. A6 Wireless Charge Coil
- Inductance, e.g. 12.5uH

