

# DATASHEET

|                    |  |
|--------------------|--|
| <b>Type</b>        | Combined antenna   |
| <b>Frequencies</b> | AMPS (824-894 MHz)<br>ISM (868 MHz)<br>GSM (900 MHz)<br>GPS/GLONASS (1572-1610 MHz)<br>DCS (1800 MHz)<br>PCS (1900 MHz)<br>3G (UMTS 2.1 GHz)<br>WIFI / BLUETOOTH (2.4 GHz) |
| <b>Mounting</b>    | Any Surface<br>Magnetic Mount<br>Patch Mount   |
| <b>Part No.</b>    | <b>PL-630MP</b>  |
| <b>Revision</b>    | 00   |





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## 1. SPECIFICATION

### 1.1. Electrical Specifications

#### Navigation (Cable 1)

|                       |                        |
|-----------------------|------------------------|
| Frequencies           | GPS (1575.42 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         |

#### Mobile (Cable2)

|                       |   |
|-----------------------|---|
| Frequencies           | AMPS (824-894 MHz)<br>ISM (868 MHz)<br>GSM (900 MHz)<br>DCS (1800 MHz)<br>PCS (1900 MHz)<br>3G (UMTS 2.1 GHz)<br>WIFI / BLUETOOTH (2.4 GHz) |
| Impedance             | 50 Ohms   |
| Polarization          | HORIZONTAL  |
| Gain                  | 0dBi  |
| VSWR                  | <2:1  |
| Power handling        | 50W   |
| Operating temperature | -40°C to +85°C  |

## 1.2. Connection Specifications

### 1.2.1. Default (recommended)

Cable 1 (Navigation):

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

Cable 2 (Mobile):

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

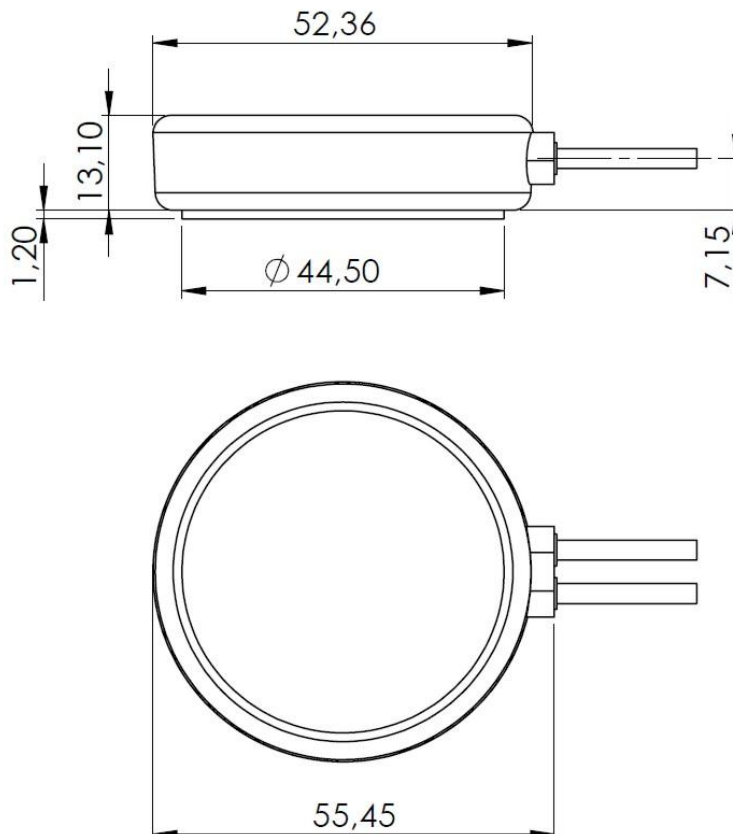
### 1.2.2. Optional

Suitable cables: RG174, RG316  
Cable length: min. 80 cm  
Suitable connectors: All connectors suitable for cables above

## 1.3. Mechanical Specifications and Dimensions

### 1.3.1. Magnetic/Patch mount

Material: ABS  
Max dimensions: 52.5mm x 13mm  
Weight: 50 g 'counted with default connection'  
Colour: Black (for different colours please ask our sales team)



## 2. MEASUREMENT

### 2.1. Set for Measurements

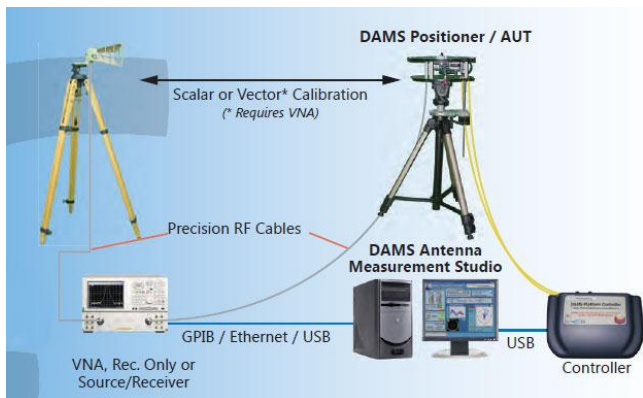
#### 2.1.1. GNSS

|                 |   |
|-----------------|---|
| Connection:     | Used default cable length and connection. |
| Temperature:    | 25 °C                                     |
| Input power:    | 0 dBm                                     |
| Voltage Supply: | 3V  |

#### 2.1.2. GSM

|              |       |
|--------------|-------|
| Temperature: | 25 °C |
| Input power: | 0 dBm |

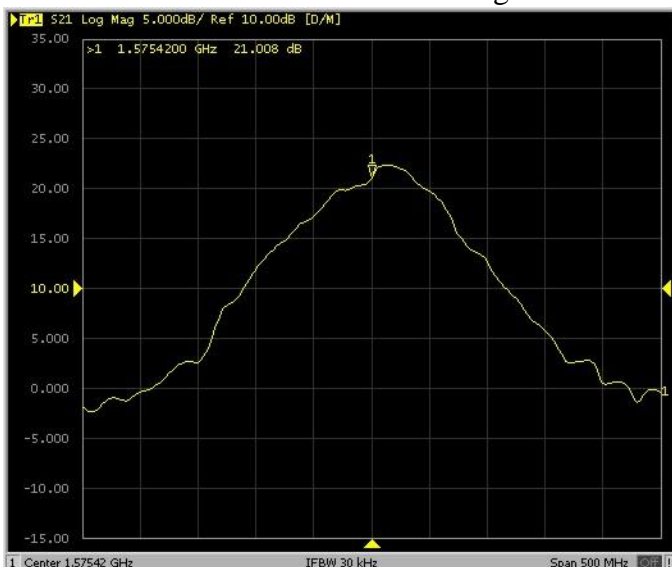
DAMS positioner with AUT and reference antenna are placed in anechoic chamber



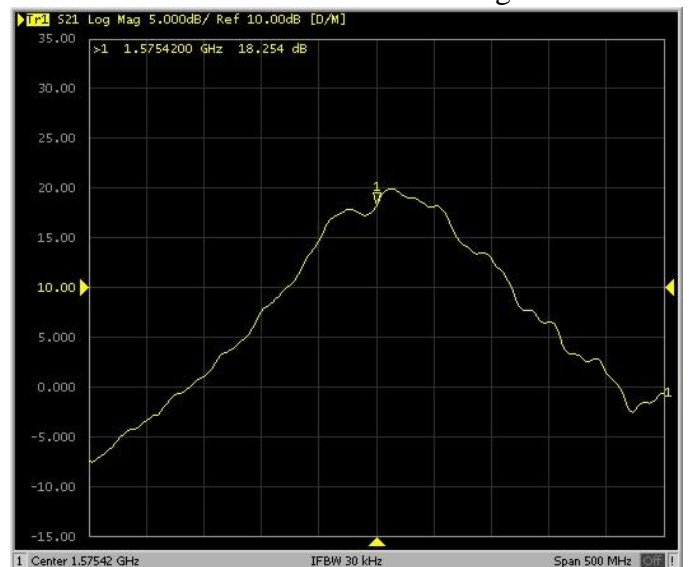
### 1.1. Electrical Characteristics

LOG MAG (GNSS):

Tested with 3m cable length



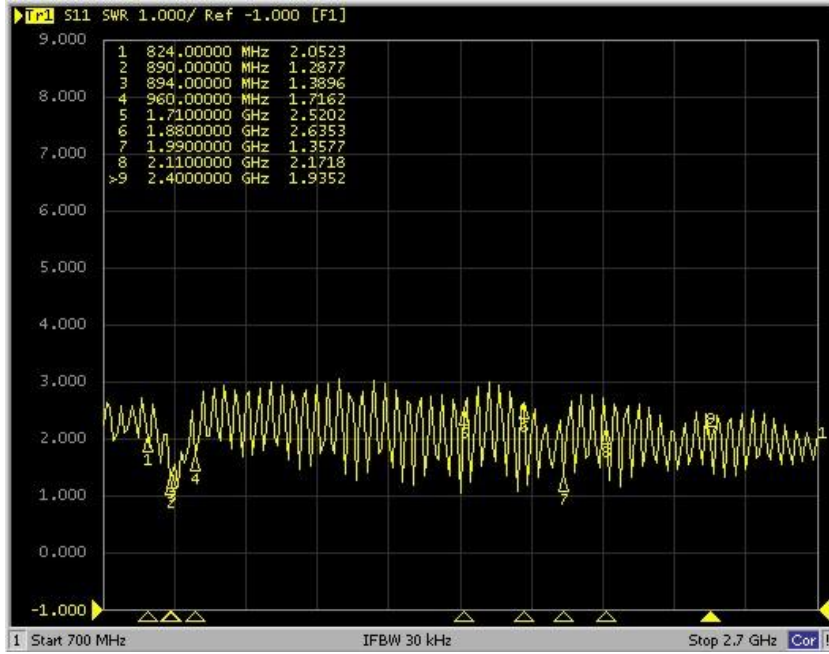
Tested with 5m cable length



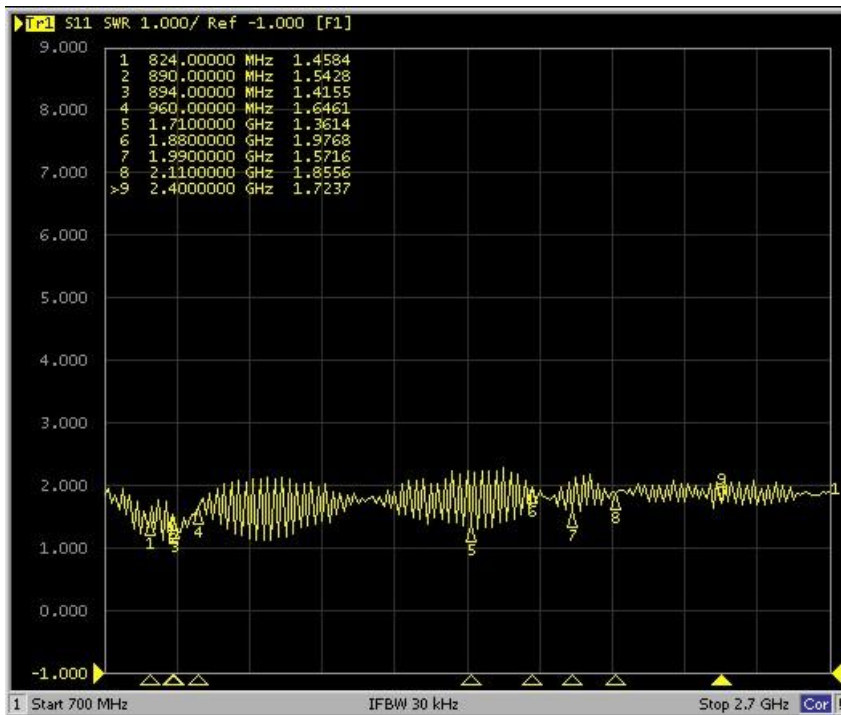


## LOG MAG (Quad Band):

Tested with 3m cable length

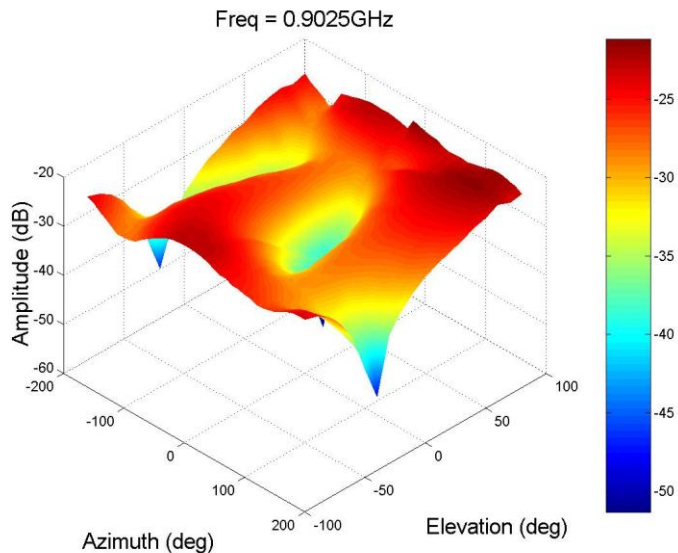


Tested with 5m cable length

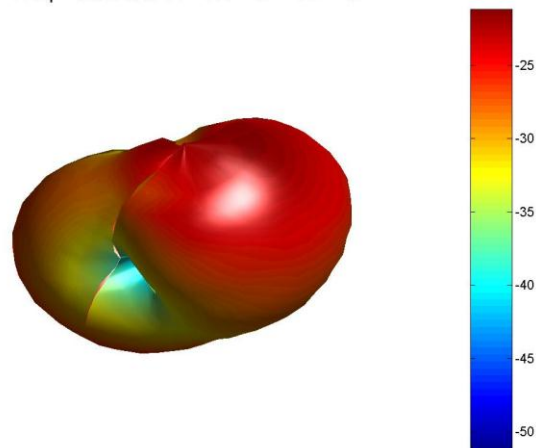


## 1.2. Radiation Patterns

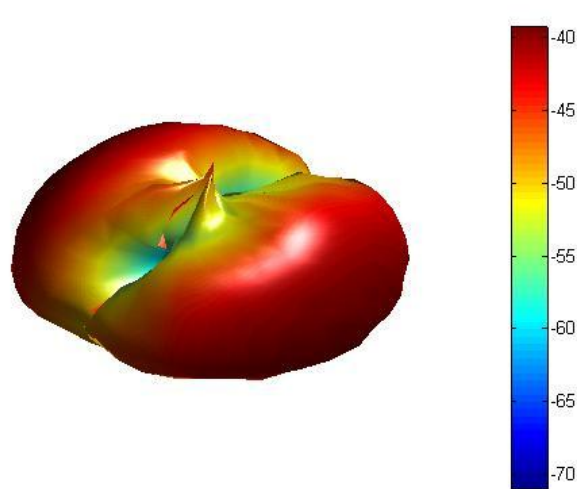
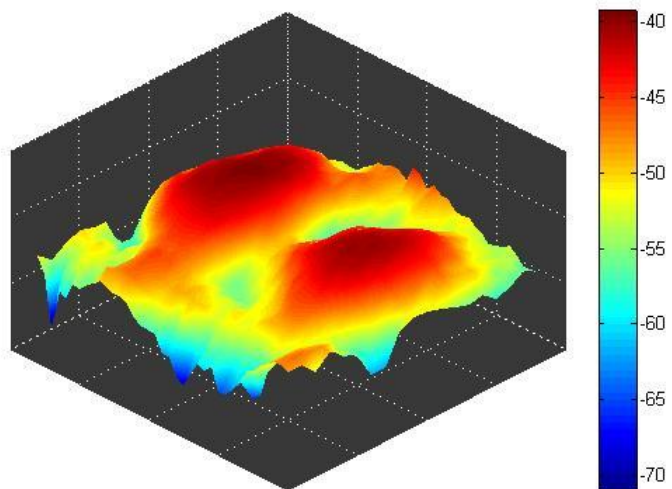
900MHz



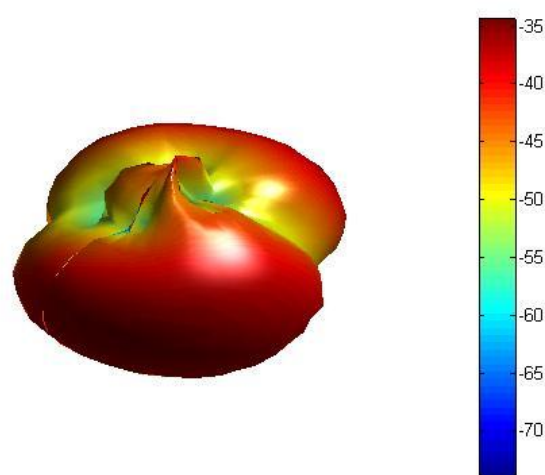
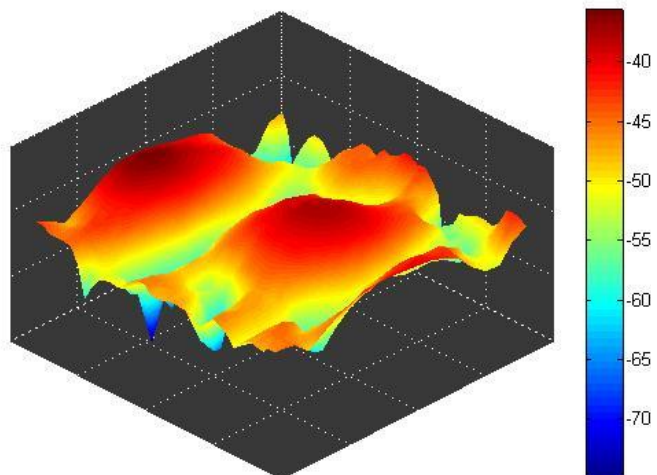
Freq = 0.9025GHz Az= 45 EL= 45



1800MHz



1900MHz



## 2. MOUNTINGS

- Patch version need clean flat surfaces
- Magnetic version can be on any magnetic materials

## 3. IMAGES

