

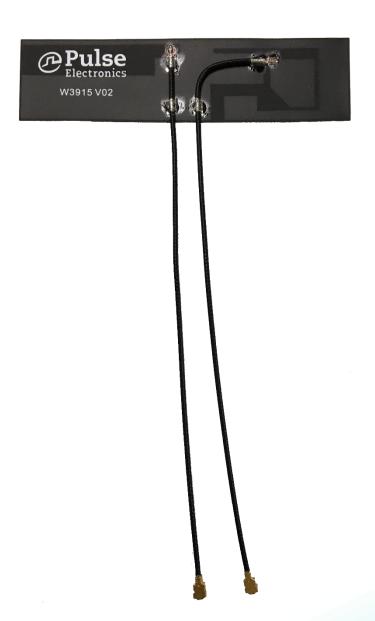
Series: Internal FPC Antenna

#### **TECHNICAL DATA SHEET**

Description: 3G 880-960/1710-2170MHz +

**GNSS Antenna** 

PART NUMBER: W3915



# Features:

- Cellular 880-960/1710-2170MHz
- GNSS 1575.42-1605MHz
- Radiator size 74x19mm
- · Cable length 100mm
- U.FL compatible connectors
  - Port 1: Cellular
  - Port 2: GNSS

# **Applications:**

- 2G, 3G radios with GNSS support
- Satellite navigation
- Telematics, Asset tracking
- Fleet management

Issue: 1730

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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Description: 3G 880-960/1710-2170MHz +

**GNSS Antenna** 

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# **ELECTRICAL SPECIFICATIONS (1)**

(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements

Frequency Cellular: 880-960 MHz/1710-2170MHz

GNSS: 1565-1605MHz

Nominal Impedance  $50\Omega$ 

Return Loss 880-915 (925-960) 6dB (4dB)

Return Loss 1710-2170 8dB

Return Loss 1575-1605 8dB

Isolation Cellular-GNSS 15dB

Total Efficiency 880-960 50%

Total Efficiency 1710-2170 75%

Total Efficiency 1575-1605 55%

Peak Gain 880-960

Peak Gain 1710-2170 2dBi

Peak Gain 1575-1605 0.5dBiC

Power withstanding 24dBm CW





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# **MECHANICAL SPECIFICATIONS**

Weight 2.35 g

Radiator size 74 x 19 mm

Radiator thickness with adhesive tape 0.2 mm

Connector type u.FL compatible

Cable type Ø1.13 coaxial cable

Cable length 100mm

Mounting with adhesive tape 3M467

# **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature -40 - +65 °C

Temperature 50 °C

Humidity 85%RH



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# **MECHANICAL DRAWING** $74.0 \pm 0.3$ W3915 V02 FPC (black soldermask + white codes) ∅ 1.13coaxial cable 880-960/1710-2170MHz port 1575.42-1605MHz port u.FL RF connector





All dimensions are in mm.



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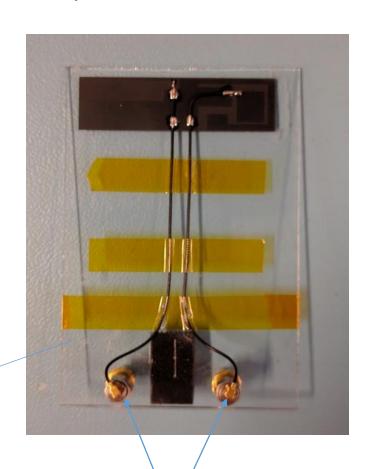
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# **OTHER SPECIFICATIONS**

# Test setup for all RF parameters



2mm thick polycarbonate plate

U.FL - SMA adapters



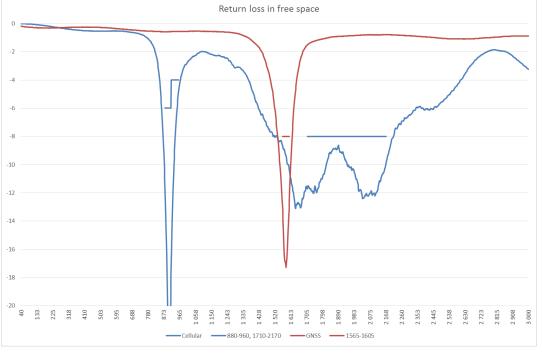
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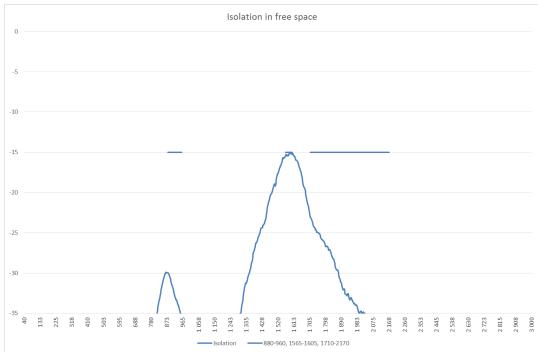
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# **CHARTS**





(1) Antenna attached on 2mm thick polycarbonate plate during electrical parameters' measurements



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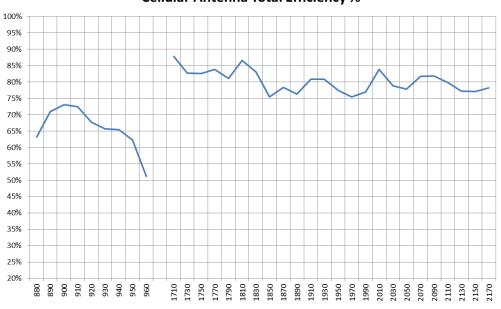
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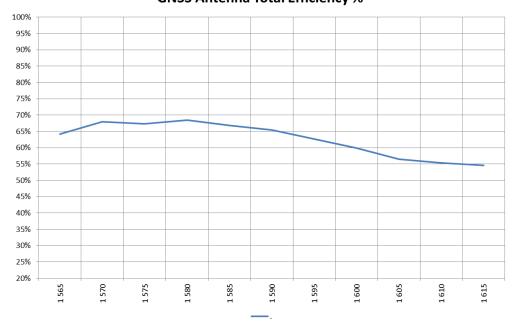
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# **CHARTS**

# **Cellular Antenna Total Efficiency %**



## **GNSS Antenna Total Efficiency %**



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ROHS



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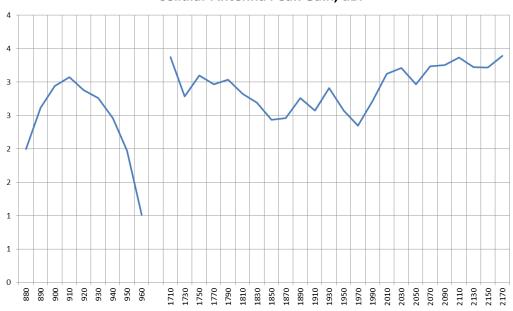
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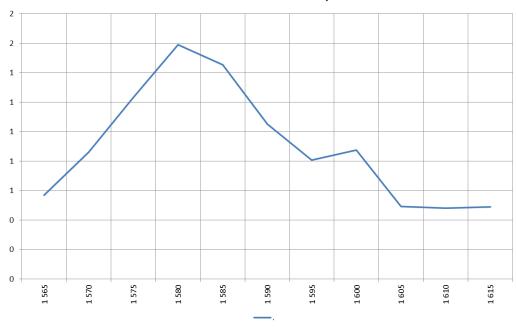
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# **CHARTS**

## Cellular Antenna Peak Gain, dBi



## **GNSS Antenna Peak Gain, dBiC**



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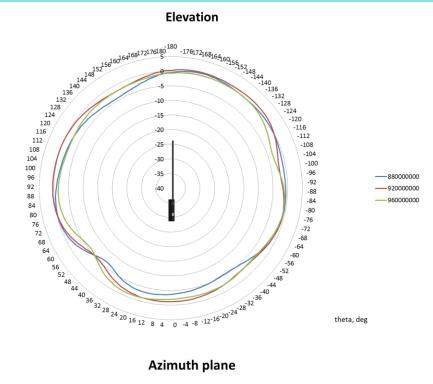
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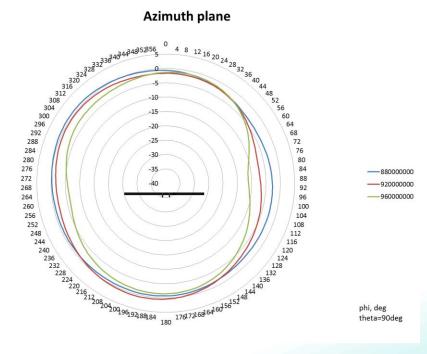
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# **CHARTS**

#### **Elevation**





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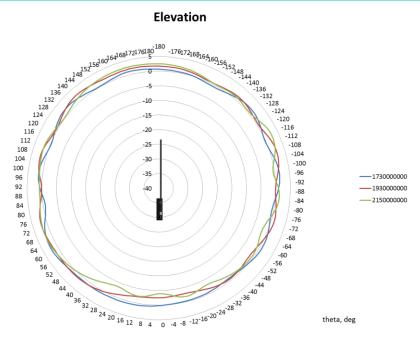
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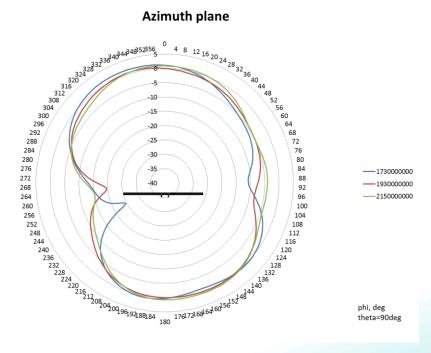
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# **CHARTS**

#### **Elevation**



#### Azimuth plane



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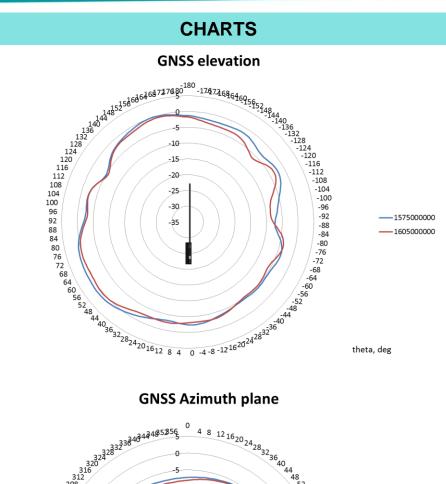
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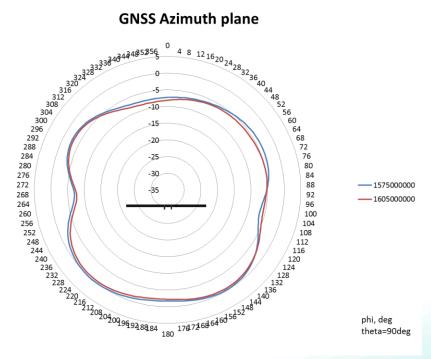
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# **CHARTS**





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# **PACKAGING**

25pcs antennas/sealed plastic bag, plastic bag size: 120mmx180mm;

1000pcs antennas/packing carton box, carton box size:460mmx235mmx140mm.