

Description: GPS L1 Antenna, 26dB LNA

PART NUMBER: GPS0010

Series: GPS Active Antenna



Features:

- L1 band 1575.42MHz
- RHCP Polarization
- LNA Gain 26dB
- Voltage 5Vdc
- Cable RG-174, SMA male
- Magnet mount
- IP66

Applications:

- Navigation, tracking
- · Asset management
- Fleet logistics
- Mounts directly on metal by magnet

All dimensions are in mm / inches

Issue: 2031

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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ELECTRICAL SPECIFICATIONS

Antenna Type Patch antenna

Frequency 1575.42 ± 1.023/ MHz

Nominal Impedance 50Ω

Return Loss <-10dB@1575MHz

Radiation Pattern Directive

Gain 3dBic±1dB

LNA Gain $28dB \pm 2dB$

Efficiency 65% Polarization **RHCP**

Current consumption <20mA

MECHANICAL SPECIFICATIONS

Overall Length 45x45x14.6 mm

Weight 127.6 q Black Antenna Color

Connector type **SMA Male**

RG-174 Cable type

Cable length 5000 mm

Magnetic Mount Mounting method

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature -30~+80° C

-30~+80° C Storage Temperature

Ingress Protection RoHS Compliant Yes



IP66

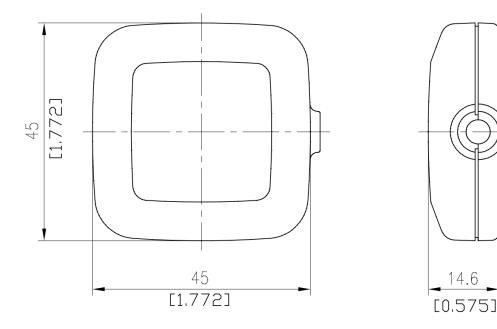


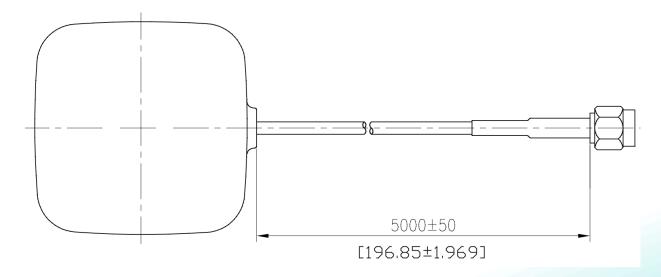
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MECHANICAL DRAWING







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TEST SETUP

Antenna connect with RF connector and measured in chamber directly



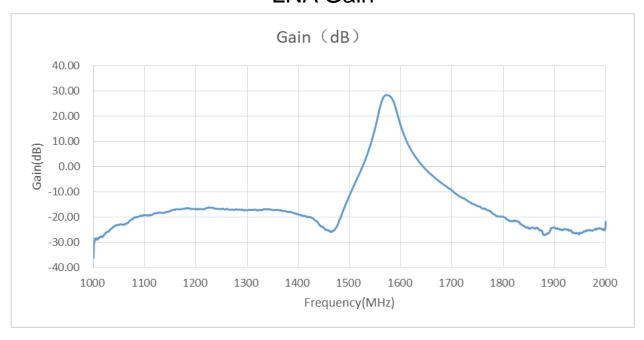
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CHARTS

LNA Gain





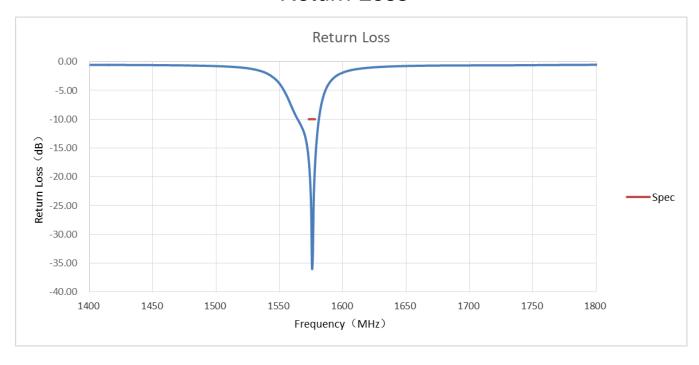
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CHARTS

Return Loss





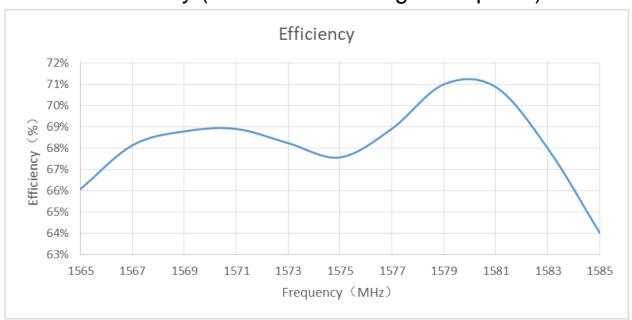
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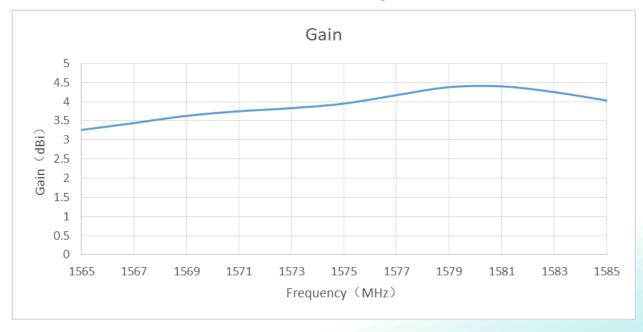
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CHARTS

Efficiency (Test with 500mm ground plane)



Gain (Test with 500mm ground plane)



Issue: 2031





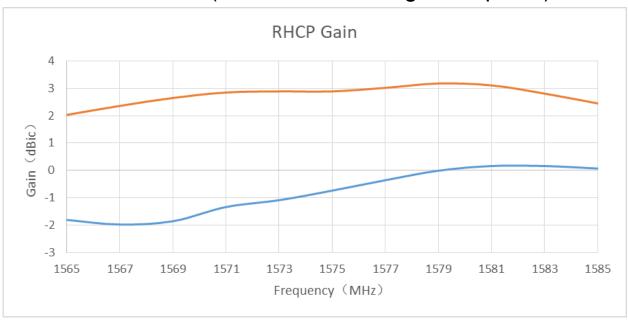
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CHARTS

RHCP Gain (Test with 500mm ground plane)





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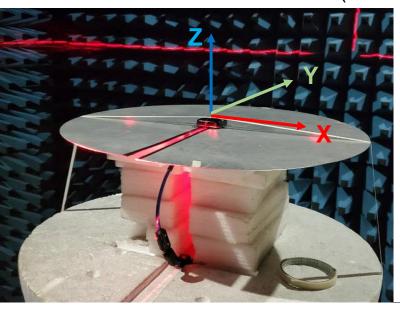
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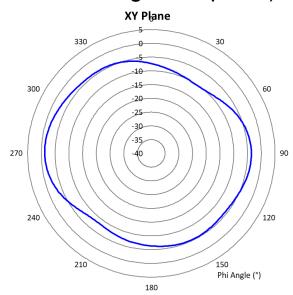
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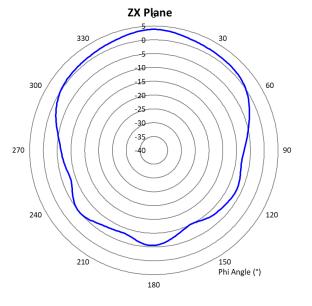
1575MHz

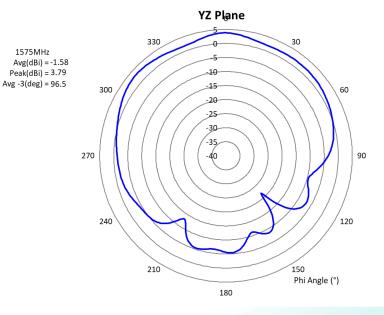
Radiation Pattern (Test with 500mm ground plane)











1575MHz Avg(dBi) = -0.54 Peak(dBi) = 3.79Avg - 3(deg) = 133.5

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PACKAGING

1 antenna packed in a plastic bag.

1 label on each plastic with part number, description, date code.