

Description: GPS L1 Antenna, 26dB LNA

#### Series: GPS Active Antenna

PART NUMBER: GPS0010



#### Features:

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

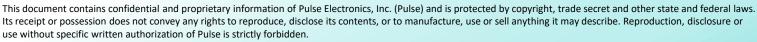
# **Applications:**

- · 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



For more information:

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#### **ELECTRICAL SPECIFICATIONS**

Antenna Type Frequency Nominal Impedance Return Loss Radiation Pattern Gain LNA Gain Efficiency	Patch antenna 1575.42 $\pm$ 1.023/ MHz 50 $\Omega$ <-10dB@1575MHz Directive 3dBic $\pm$ 1dB 28dB $\pm$ 2dB 65%
Polarization	RHCP
Current consumption	<20mA
MECHANICAL SPECIFICATIONS	
Overall Length Weight Antenna Color Connector type Cable type Cable length Mounting method	45x45x14.6 mm 127.6 g Black SMA Male RG-174 5000 mm Magnetic Mount

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature Storage Temperature Ingress Protection RoHS Compliant -30~+80° C -30~+80° C IP66 Yes

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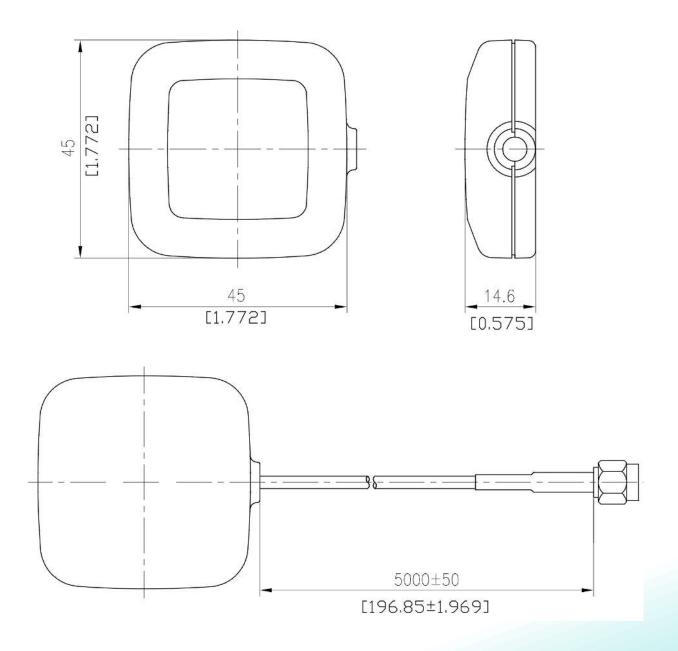


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### **MECHANICAL DRAWING**





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**TEST SETUP** 

Antenna connect with RF connector and measured in chamber directly

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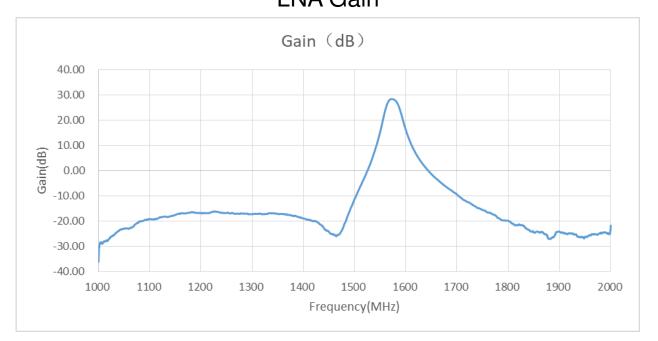


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# **CHARTS** LNA Gain



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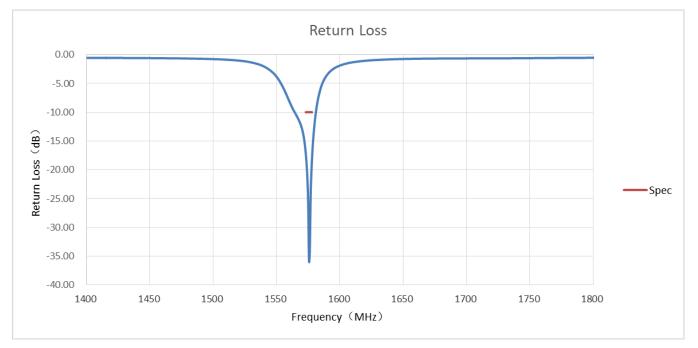
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# CHARTS

#### Return Loss



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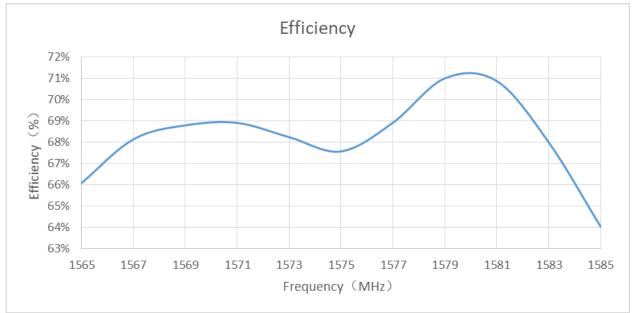
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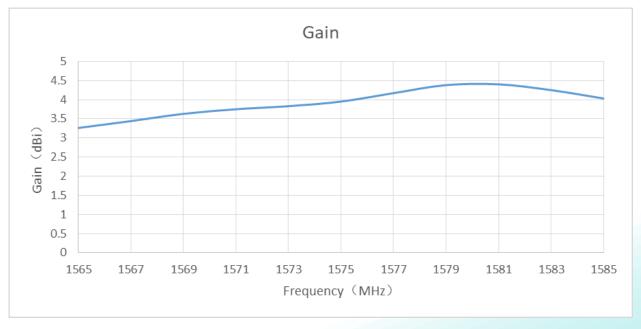
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CHARTS

# Efficiency (Test with 500mm ground plane)



# Gain (Test with 500mm ground plane)



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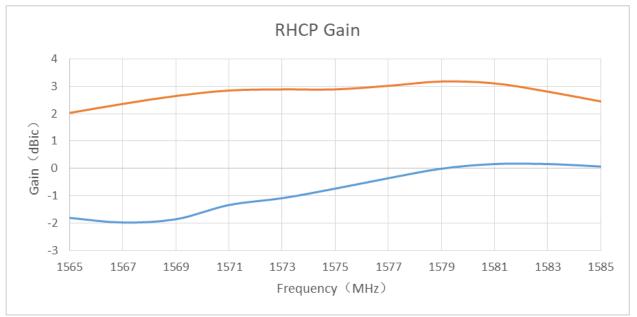
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CHARTS

# RHCP Gain (Test with 500mm ground plane)



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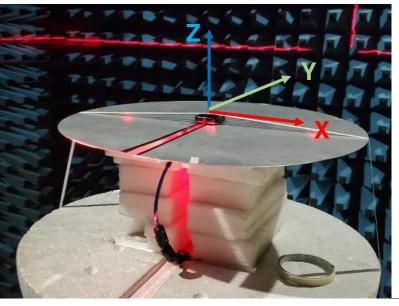
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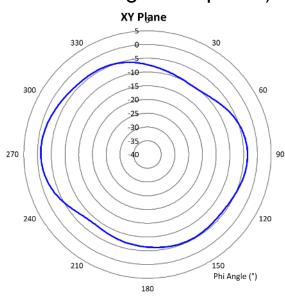
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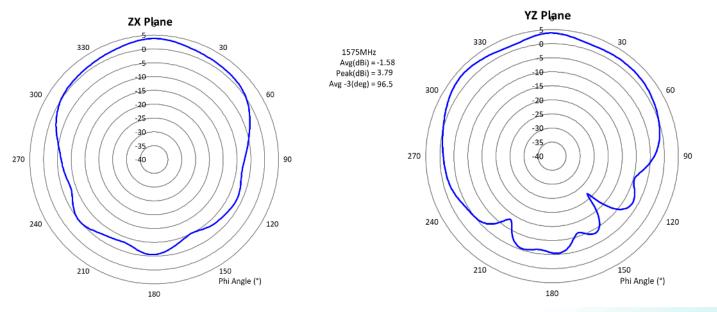
CHARTS

# Radiation Pattern (Test with 500mm ground plane)





1575MHz Avg(dBi) = -4.96 Peak(dBi) = -1.19 Avg -3(deg) = 102.5



1575MHz Avg(dBi) = -0.54 Peak(dBi) = 3.79 Avg -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.

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