

# Active GPS Antenna

Pulse Part Number W4000 Family



The W4000 family of active GPS ultra thin, oval shaped antennas offer versatility for installation, as they can be positioned on the dash or window without orientation concerns



### Features

- 50 percent thinner than standard GPS antennas
- Versatile installation inside the vehicle - no specific installation location or orientation required.
- Glass or dashboard mount
- Offered with a variety of cable lengths and connector options
- RoHS Compliant Product

### Applications

- Vehicle tracking
- Fleet management / asset tracking
- In-car infotainment
- "Pay-as-you-drive" insurance applications

| P/N       | Cable Length<br>(feet / meters) | Connector          |
|-----------|---------------------------------|--------------------|
| W4000D197 | 16.4 / 5                        | MMCX Male Straight |
| W4000G197 | 16.4 / 5                        | SMA Male Straight  |
| W4000J197 | 16.4 / 5                        | MCX Male Straight  |
| W4000L197 | 16.4 / 5                        | FME Male Straight  |
| W4000G059 | 5 / 1.5                         | SMA Male Straight  |

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## Electrical Specifications

|                                |                  |
|--------------------------------|------------------|
| Frequency [MHz]                | 1575.42          |
| Nominal Impedance [ $\Omega$ ] | 50               |
| VSWR Max                       | 1.5:1            |
| Gain [dBi Max]                 | 1.5              |
| Radiation Pattern              | Omni-directional |
| Cable Type                     | RG-174           |

## LNA Specifications

|                    |                    |
|--------------------|--------------------|
| Gain [dB $\pm$ 2]  | 26                 |
| Noise Figure [dBi] | 1 Max              |
| Current Draw [mA]  | 12 typical         |
| Voltage [Dc]       | 3 - 5 ( $\pm$ 10%) |

## Mechanical Specifications

|                        |                                    |
|------------------------|------------------------------------|
| Radome Material        | PC-ABS Plastic Blend               |
| Color                  | Black                              |
| Height [Inches/Meters] | .2 / 5.45                          |
| Width [Inches/Meters]  | 1.18 x 2 / 30 x 50                 |
| Mounting               | Die cut double-sided tape included |

## Environmental Specifications

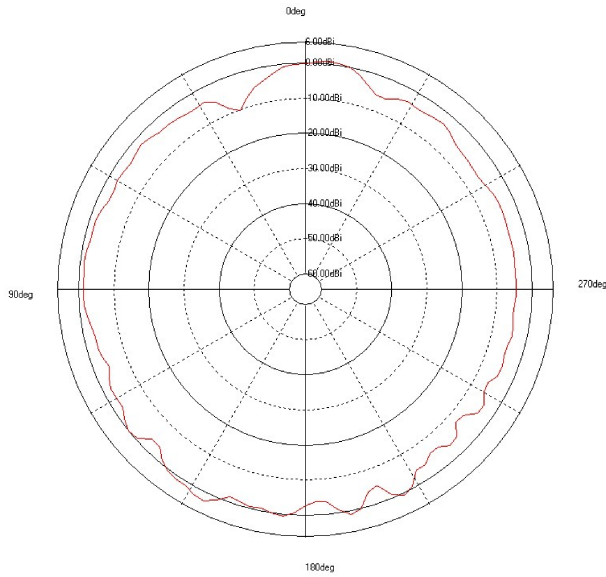
|                                       |            |
|---------------------------------------|------------|
| Operating Temperature [ $^{\circ}$ C] | -40 to +85 |
| Storage Temperature [ $^{\circ}$ C]   | -40 to +85 |
| Relative Humidity [%]                 | 20 to 95   |

# Active GPS Antenna

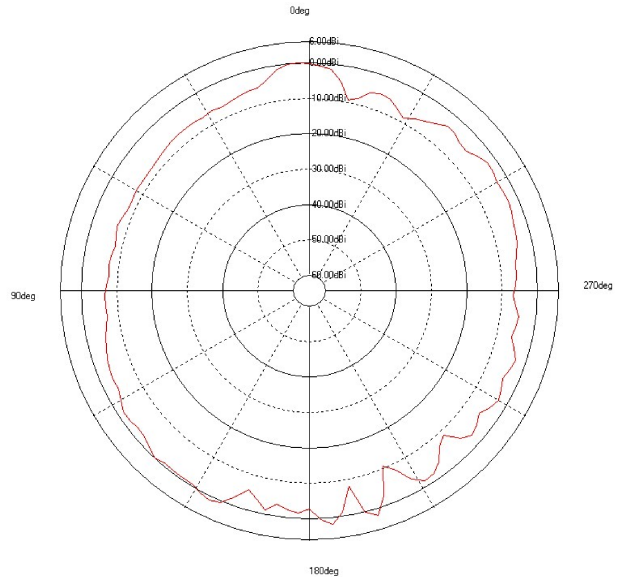
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## Radiation Patterns

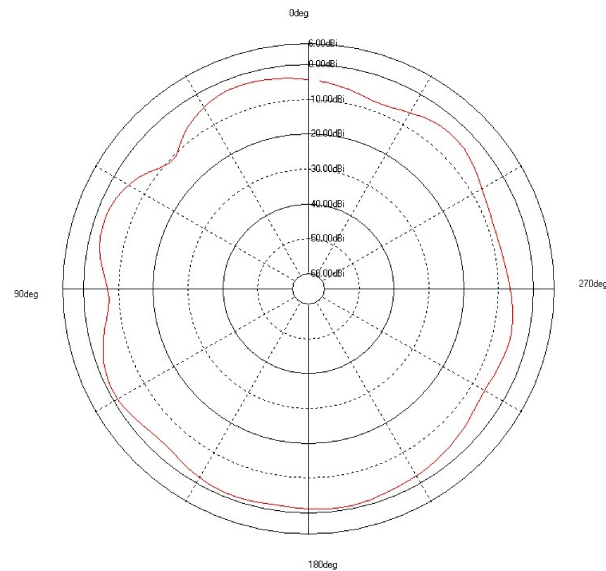
**XZ Plane**



**ZY Plane**



**XY Plane**



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