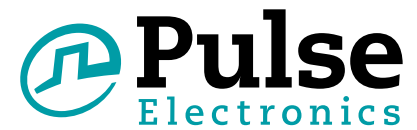


# IP67 Active 6 Band GPS Antenna

Pulse Part Number W4120 Family



The W4120 family offers a multi-band, active GPS antenna combining compact size with the ability to support most international wireless services. The active GPS antenna provides exact location-based information which can be communicated using the 3G frequencies. The low profile housing is compatible with IP67 allowing for outdoor use.

## Features

- Active GPS & 3G functionality
- IP 67 rated Product
- Adhesive Mounting
- Other cable and connector variations available
- RoHS Compliant Product

## Applications

- Navigation and location
- Fleet management
- Intelligent vehicle safety
- Asset tracking
- Pay-as-you-drive insurance

| P/N         | Cable Length | Connector                       |
|-------------|--------------|---------------------------------|
| W4120GG3000 | 9.8' (3 m)   | 3G - SMA Male<br>GPS - SMA Male |
| W4120EG5000 | 16.4' (5 m)  | 3G - SMA Male<br>GPS - MMCX     |
| W4120ER5000 | 16.4' (5 m)  | 3G - MCX<br>GPS - MMCX          |
| W4120GG5000 | 16.4' (5 m)  | 3G - SMA Male<br>GPS - SMA Male |
| W4120GL5000 | 16.4' (5 m)  | 3G - FME<br>GPS - SMA Male      |

# IP67 Active 6 Band GPS Antenna

Pulse Part Number W4120 Family

## Electrical Specifications

|                                |                  |                 |
|--------------------------------|------------------|-----------------|
| Frequency 1 [MHz]              |                  | 806-960         |
| Frequency 2 [MHz]              |                  | 1710-2170       |
| Frequency 3 [MHz]              |                  | 1574.4-1576.4   |
| Nominal Impedance [ $\Omega$ ] |                  | 50              |
| VSWR                           | Freq 1           | 2.5:1           |
|                                | Freq 2           | 2.5:1           |
|                                | Freq 3           | 2.0:1           |
| Gain                           | Freq 1 [dBi avg] | 0               |
|                                | Freq 2 [dBi avg] | 0               |
| Polarization                   | Freq 1           | Linear Vertical |
|                                | Freq 2           | Linear Vertical |
|                                | Freq 3           | RHCP            |
| Cable                          | Type [Freq 1/2]  | RG-174          |
|                                | Type [GPS]       | RG-174          |

## LNA Specifications

|                                |            |
|--------------------------------|------------|
| Gain at 3V [dBic / dB $\pm$ 2] | 5 / 26     |
| Gain at 5V [dBic / dB $\pm$ 2] | 5 / 25     |
| Noise Figure                   | 1.5 dB max |
| Current Draw [mA Max]          | 25         |
| Voltage [V DC]                 | 3 - 5      |

## Environmental Specifications

|                                       |            |
|---------------------------------------|------------|
| Operating Temperature [ $^{\circ}$ C] | -40 to +85 |
| Storage Temperature [ $^{\circ}$ C]   | -40 to +85 |
| Relative Humidity [%]                 | 100        |

## Mechanical Specifications

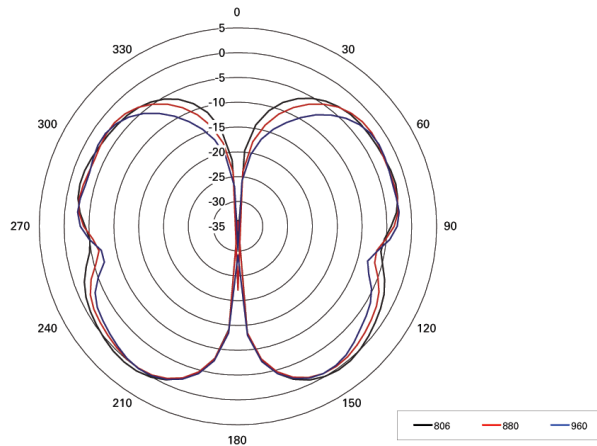
|                        |                                       |
|------------------------|---------------------------------------|
| Radome Material        | PC/PET, UV resistant                  |
| Color                  | Black                                 |
| Ingress Protection     | IP67                                  |
| Weight [oz/g]          | 4.7 / 145                             |
| Dimensions [Inches/mm] | 5.4 x 1.5 x .6<br>[136 x 37.7 x 13.8] |
| Mounting               | Adhesive Tape                         |

# IP67 Active 6 Band GPS Antenna

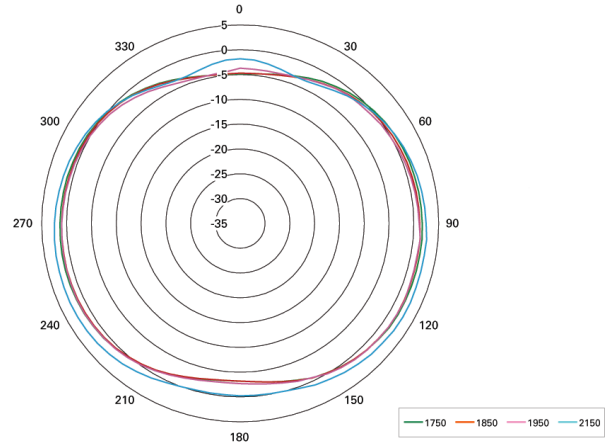
Pulse Part Number W4120 Family

## Radiation Patterns

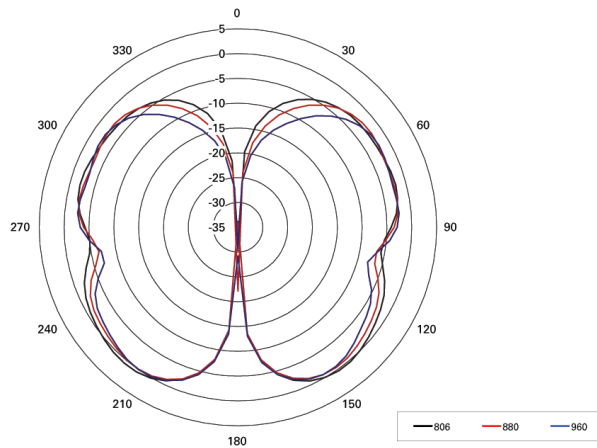
Horizontal Plane - 806-960 MHz



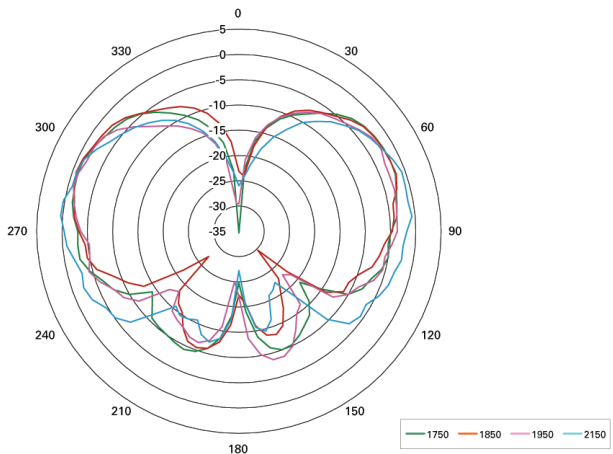
Horizontal Plane - 1710-2170 MHz



Vertical Plane - 806-960 MHz



Vertical Plane - 1710-2170 MHz



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