

# IP67 Active 6 Band GPS Antenna

Pulse Part Number GPSSB800/2170 Family



The GPSSB800/2170 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                         |
|-----------------|--------------|-----------------------------------|
| GPSSB800/2170FS | 16'4" (5 m)  | 3G - FME Female<br>GPS - SMA Male |

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## 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

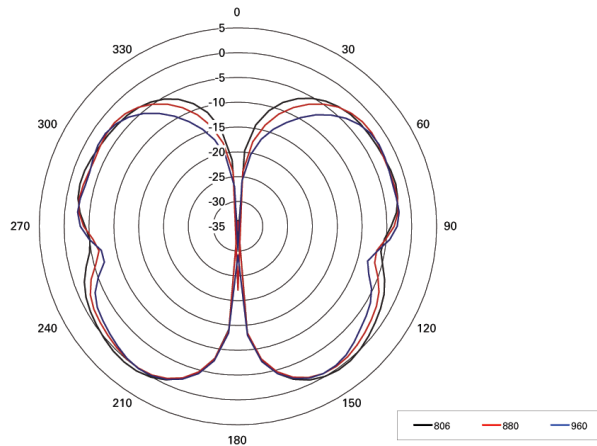
|                        |                                       |
|------------------------|---------------------------------------|
| Radome Material        | PC/PET, UV resistant                  |
| Color                  | Black                                 |
| Ingress Protection     | IP67                                  |
| 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

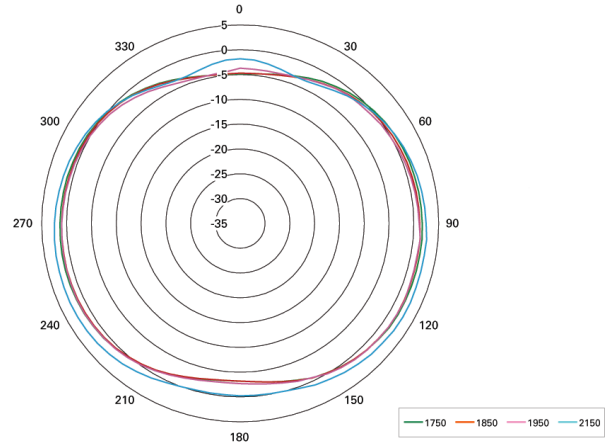
Pulse Part Number GPSSB800/2170 Family

## Radiation Patterns

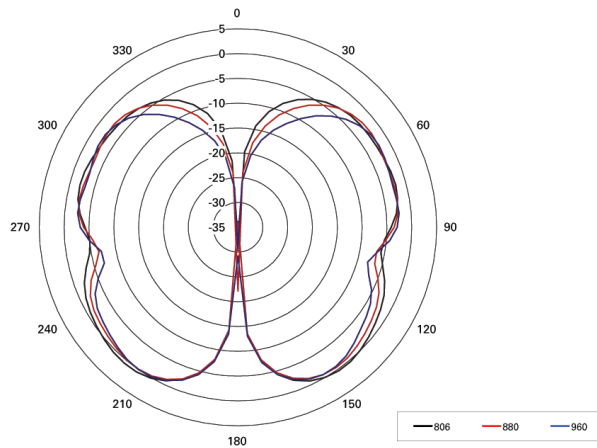
Horizontal Plane - 806-960 MHz



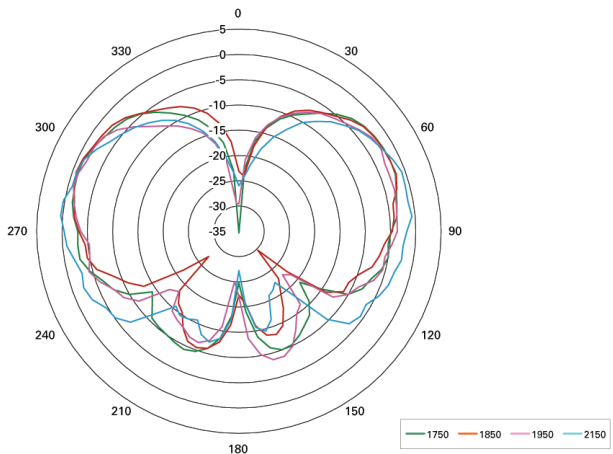
Horizontal Plane - 1710-2170 MHz



Vertical Plane - 806-960 MHz



Vertical Plane - 1710-2170 MHz



## For More Information

### Pulse Worldwide Headquarters

12220 World Trade Drive  
San Diego, CA 92128  
U.S.A.

Tel: 858 674 8100  
Fax: 858 674 8262

### Larsen Brand Antennas

3611 NE 112th Avenue  
Vancouver, WA 98682  
USA

Tel: 360 944 7551  
Fax: 360 944 7556

### Europe Headquarters

Pulse GmbH & Co. KG  
Zeppelinstrasse 15  
Herrenberg  
Germany

Tel: 49 7032 7806 0  
Fax: 49 7032 7806 135

### Asia Headquarters

B402, Shenzhen Academy of  
Aerospace Technology Bldg.  
10th Kejian Road, High-Tech Zone  
Nanshan District, Shenzhen, PR China 518057

Tel: 86 755 33966678  
Fax: 86 755 33966700

### Pulse North Asia

3F, No. 198, Zhongyuan Road  
Zhongli City, Taoyuan County 320  
Taiwan R. O. C.

Tel: 886 3 4356768  
Fax: 886 3 4356823

### Pulse (Suzhou) Wireless Products Co., Inc.

99 Huo Ju Road, (#29 Bldg, 4th Phase)  
Suzhou New District  
Science & Tech Industrial Park  
Jiangsu Province, Suzhou 215009 PR China

Tel: 86 512 6807 9998  
Fax: 86 512 6809 8023

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