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 GPS - SMA Male
W4120EG5000	16.4' (5 m)	3G - SMA Male GPS - MMCX
W4120ER5000	16.4' (5 m)	3G - MCX GPS - MMCX
W4120GG5000	16.4' (5 m)	3G - SMA Male GPS - SMA Male
W4120GL5000	16.4' (5 m)	3G - FME 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 [Ω]	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 ± 2)]	5 / 26
Gain at 5V [dBic / dB ± 2]	5 / 25
Noise Figure	1.5 dB max
Current Draw [mA Max]	25
Voltage [V DC]	3 - 5

Environmental Specifications

Operating Temperature [°C]	-40 to +85
Storage Temperature [°C]	-40 to +85
Relative Humidity [%]	100

Mechanical Specifications

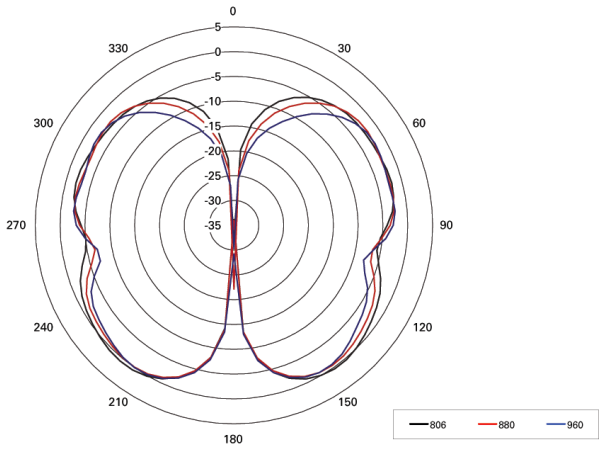
Radome Material	PC/PET, UV resistant
Color	Black
Ingress Protection	IP67
Weight [oz/g]	4.7 / 145
Dimensions [Inches/mm]	5.4 x 1.5 x .6 [136 x 37.7 x 13.8]
Mounting	Adhesive Tape

IP67 Active 6 Band GPS Antenna

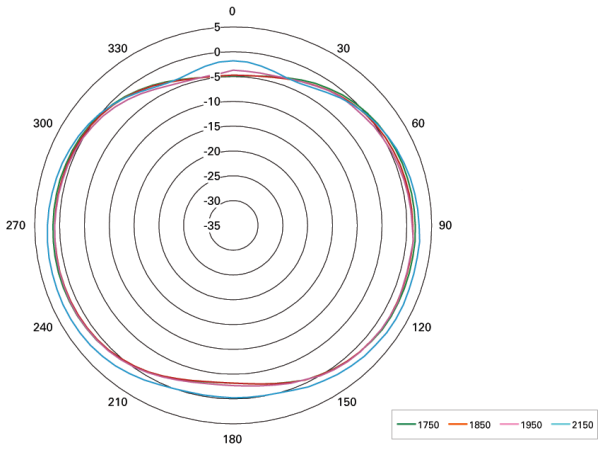
Pulse Part Number W4120 Family

Radiation Patterns

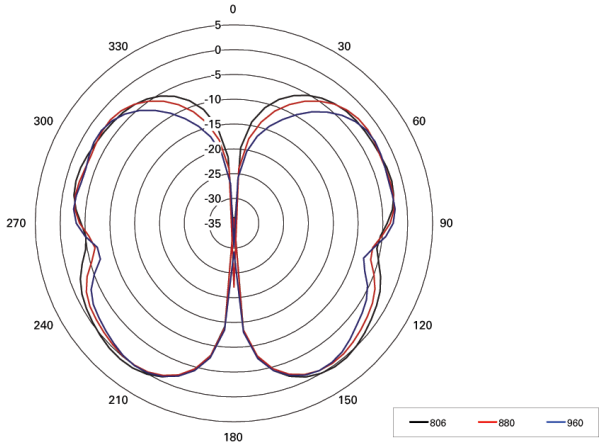
Horizontal Plane – 806-960 MHz



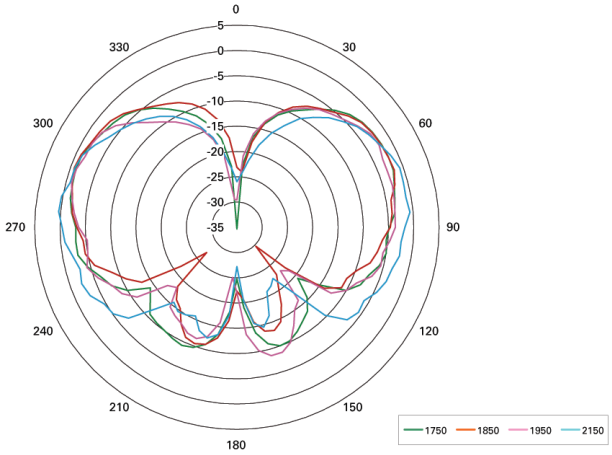
Horizontal Plane – 1710-2170 MHz



Vertical Plane – 806-960 MHz



Vertical Plane – 1710-2170 MHz



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: 369 944 7556

Europe Headquarters
Pulse GmbH & Do, 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 Kejinan Road, High-Tech Zone
Nanshan District, Shenzen, 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

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice. Other brand and product names mentioned herein may be trademarks or registered trademarks of their respective owners. © Copyright, 2010. Pulse Electronics, Inc. All rights reserved.