

TECHNICAL DATA SHEET

Description: 5G-FR1/WiFi/GNSS Low Profile

Vehicular Multiband Antenna

PART NUMBER: ARM5GXXXXXDM





Features:

- 2x 617-960/1710-6000MHz
 - 4G (LTE) / 5G-FR1
 - Includes Band 71 (617-698 MHz)
- 2x 2400-2500/5150-5925MHz WiFi
- 1x GNSS Active:
 - · Beidou, GPS, Glonass
 - RHCP polarization
 - · Amplifier Gain 30dBi
- Omni radiation pattern
- Size: L x W x H 202.3 x 88.5 x 45mm
- IP67

Applications:

- 2G/3G/4G/5G radios
- CBRS Band 42 and 48 (3.4-3.7GHz)
- Vehicular use
- Utility boxes
- Smart metering
- IoT Devices

Issue: 2111

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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Pulse Worldwide Headquarters 15255 Innovation Drive #100 San Diego, CA 92128 USA Tel:1-858-674-8100

Pulse/Larsen Antennas 18110 SE 34th St Bldg 2 Suite 250 Vancouver, WA 98683 USA Europe Headquarters Pulse GmbH & Do, KG Zeppelinstrasse 15 Herrenberg, Germany

Pulse (Suzhou) Wireless Products Co, Inc. 99 Huo Ju Road(#29 Bldg,4th Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998 1



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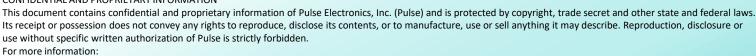
PART NUMBER: ARM5GXXXXXDM

This document covers all product variants of the following product family

Product	Total Cable Leads	LTE Cable Leads	WiFi Cable Leads	GPS Cable Leads	Housing Color	Cable Length	Mounting
ARM5G62311DM	6	2 (with SMA Male)	3 (with RP-SMA Male)	1 (with SMA Male)	Black	17 FT or 5181mm	1. Direct Mount; 7/8" Hole Required 2. Mounting Surface thickness < 0.25"
ARM5G62312DM	6	2 (with SMA Male)	3 (with RP-SMA Male)	1 (with SMA Male)	White		
ARM5G52211DM	5	2 (with SMA Male)	2 (with RP-SMA Male)	1 (with SMA Male)	Black		
ARM5G52212DM	5	2 (with SMA Male)	2 (with RP-SMA Male)	1 (with SMA Male)	White		
ARM5G42111DM	4	2 (with SMA Male)	1 (with RP-SMA Male)	1 (with SMA Male)	Black		
ARM5G42112DM	4	2 (with SMA Male)	1 (with RP-SMA Male)	1 (with SMA Male)	White		
ARM5G32011DM	3	2 (with SMA Male)	0	1 (with SMA Male)	Black		
ARM5G32012DM	3	2 (with SMA Male)	0	1 (with SMA Male)	White		

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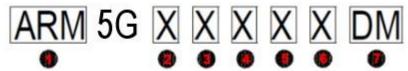
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This document covers all product variants of the following product family

Product Numbering

Vehicular Multiband Antenna with Direct Mount

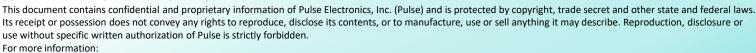
(Part Number)



	Product ID: ARMADILLO		
	Total Number of Cable leads		
	Total Number of LTE Cable Leads		
	Total Number of WiFi Cable Leads		
	Total Number of GPS Cable Leads		
•	The Color of the Plastic Housing 1=Black; 2= White		
	Mounting: Direct Mount; 7/8" Hole Required		

Issue: 2111

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ELECTRICAL SPECIFICATIONS

Frequency 5G-FR1/LTE	617-960MHz, 1710-6000MHz
Frequency WiFi	2400-2500MHz, 5150-5925MHz
Nominal Impedance	50 Ω
VSWR*	
617-960MHz	<2.5
1710-6000MHz	<2.2
2400-2500MHz	<2
5150-5925MHz	<2
Isolation*	
617-960MHz, 1710-6000MHz	-8dB
2400-2500MHz, 5150-5925MHz	-10dB
Average Peak Gain**	
617-960MHz;	2.2dBi
1710-6000MHz	4.6dBi
2400-2500MHz	5.4dBi
5150-5925MHz	6.3dBi
Polarization	Vertical

^{*}Test on 500mm ground plane with 17ft(5.2m) LMR195 cable

^{**}Test on 500mm ground plane with 1ft(304.8mm) LMR195 cable



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ELECTRICAL SPECIFICATIONS

GPS Antenna

Frequency 1561.098±2.046MHz/

1575.42±1.023MHz/

1602.5625±4MHz

Nominal Impedance 50 Ω

VSWR <2

Gain (Radiating Element) -1 dBic±1 dB

Gain (LNA Gain) 30 dB± 2 dB

Polarization RHCP

Out of Band Rejection

617 MHz >70 dB

960 MHz >65 dB

1710 MHz >60 dB

6000 MHz >60 dB

2400 MHz >65 dB

2700 MHz >65 dB

Noise Figure <2.4 dB

Operating Voltage 3.3 – 5 Vdc

Current Consumption <15mA

RF-chain line-up Ant-Filter1-LNA1-Filter2-LNA2





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MECHANICAL SPECIFICATIONS

Overall Length 202.3mm X 88.5mm X 45mm

Weight 1.15 kg

Antenna Color / Material Black or White

Connector type Refer to Page 2

Cable type Refer to Page 2

Cable length Refer to Page 2

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature -40 ~ +85° C

Storage Temperature -40 ~ +85° C

Ingress Protection IP67

RoHS Compliant Yes

OTHER SPECIFICATIONS

Total cable assembly loss for 5.2m (17') LMR-195 @850MHz	2.1dB
Total cable assembly loss for 5.2m (17') LMR-100 @1575MHz	5.9dB
Total cable assembly loss for 5.2m (17') LMR-195 @1930MHz	3.2dB
Total cable assembly loss for 5.2m (17') LMR-195 @2450MHz	3.6dB
Total cable assembly loss for 5.2m (17') LMR-195 @2500MHz	3.7dB
Total cable assembly loss for 5.2m (17') LMR-195 @5350MHz	5.5dB



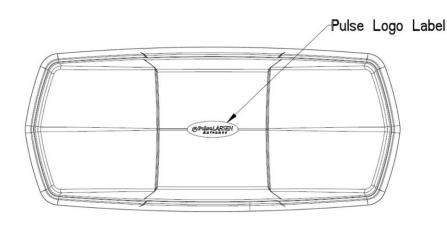
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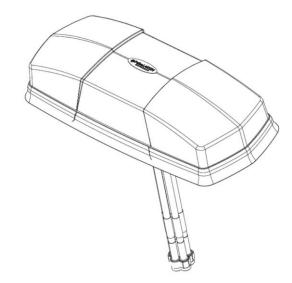
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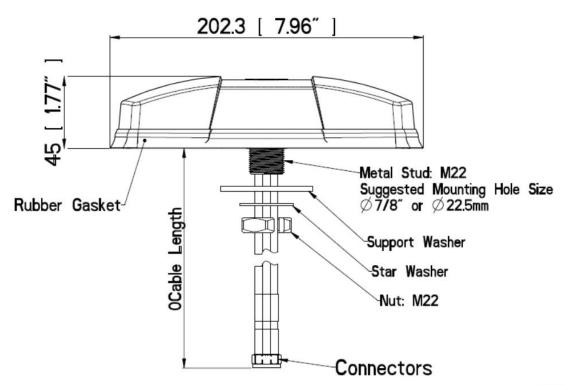
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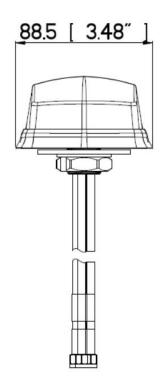
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MECHANICAL DRAWING











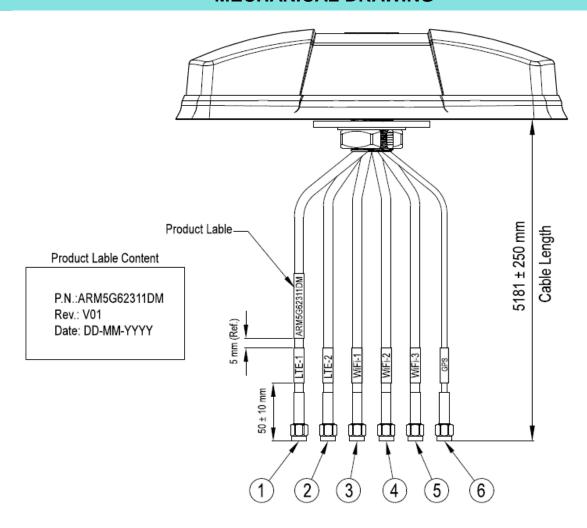
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MECHANICAL DRAWING



ARM5G62311DM		CABLE	CABLE LENGTH	CONNECTOR
1	LTE-1 Cable Assy	LMD 405 *		SMA Male
2	LTE-2 Cable Assy	LMR-195 *		
3	WiFi-1 Cable Assy		5181 mm /	
4	WiFi-2 Cable Assy	LMR-195*	204" /	RP-SMA Male
5	WiFi-3 Cable Assy		17 FT	
6	GPS Cable Assy	LMR-100*		SMA Male

^{*} or equivalent



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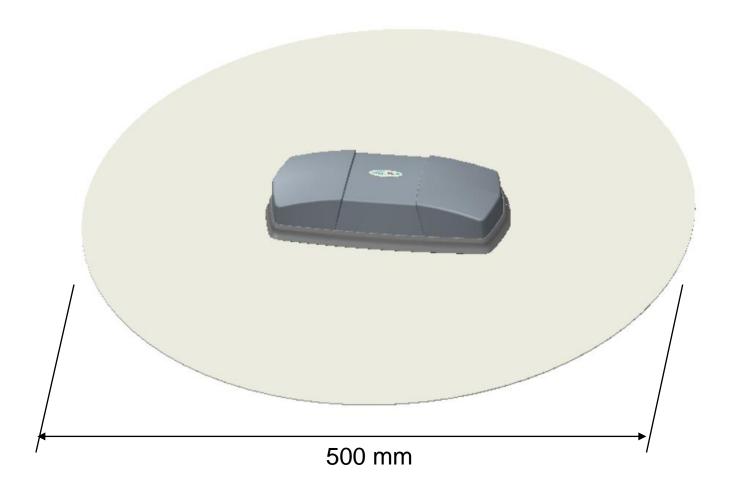
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TEST SETUP

Antenna tested on a Ø500mm ground plane.





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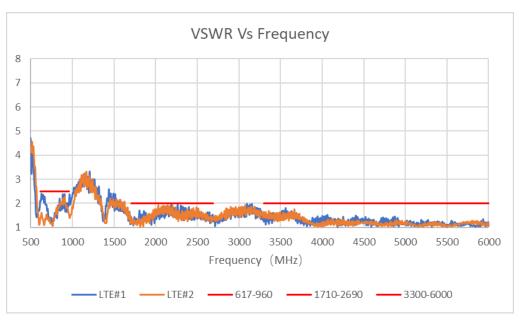
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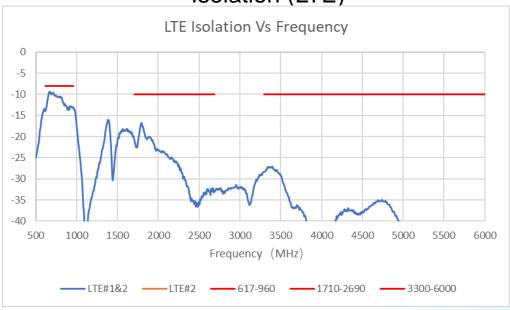
PART NUMBER: ARM5GXXXXXDM

CHARTS

VSWR (LTE)



Isolation (LTE)



Note: Antenna tested with 5m cable on 500mm (dia) ground plane





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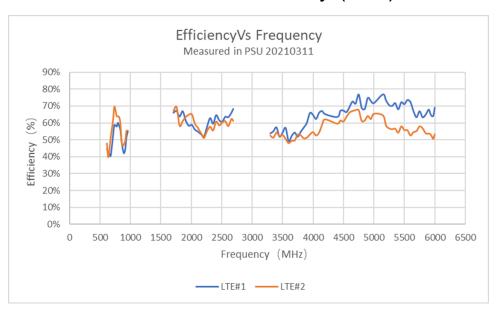
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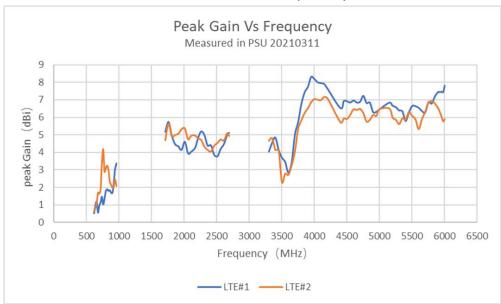
PART NUMBER: ARM5GXXXXXDM

CHARTS

Radiation Efficiency (LTE)



Peak Gain (LTE)



Note: Antenna tested with 1ft(304.8mm) cable on 500mm (dia) ground plane





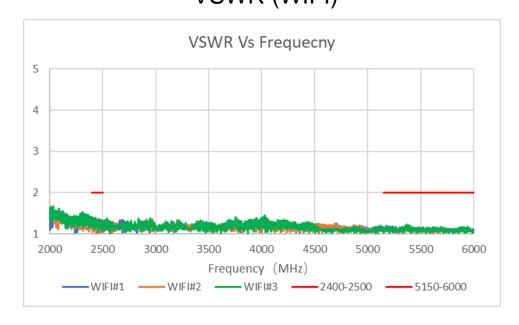
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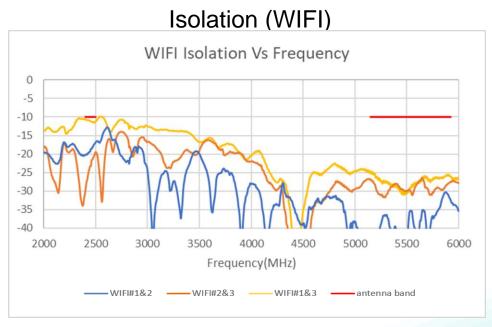
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CHARTS VSWR (WIFI)





Note: Antenna tested with 5m cable on 500mm (dia) ground plane





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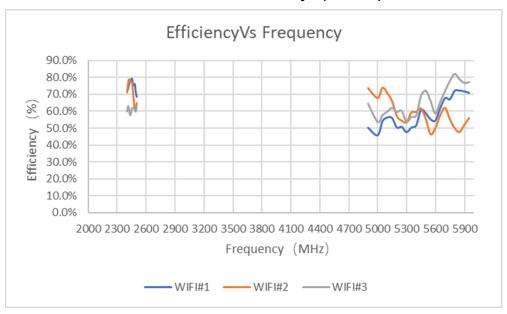
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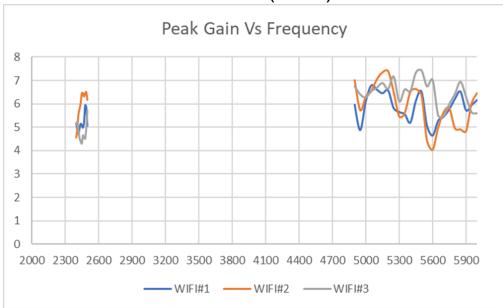
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CHARTS

Radiation Efficiency (WIFI)



Peak Gain (WIFI)



Note: Antenna tested with 1ft(304.8mm) cable on 500mm (dia) ground plane



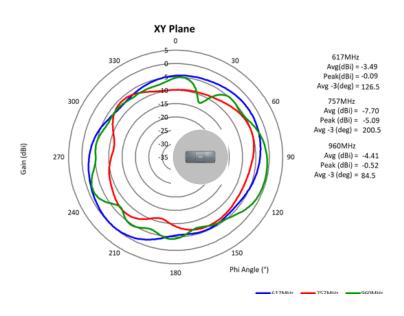
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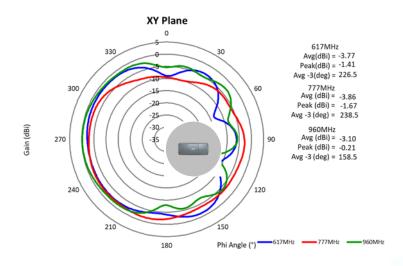
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CHARTS



LTE1 XY plane radiation pattern



LTE2 XY plane radiation pattern



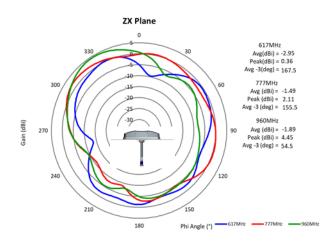
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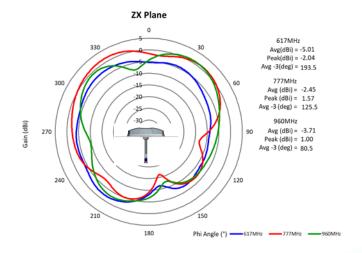
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CHARTS



LTE1 ZX plane radiation pattern



LTE2 ZX plane radiation pattern





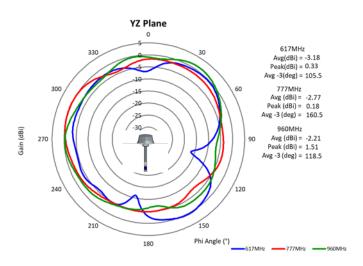
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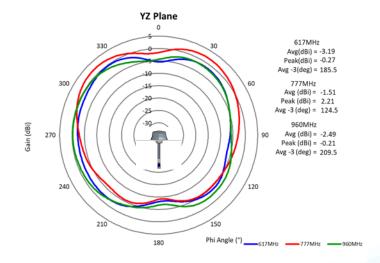
Vehicular Multiband Antenna

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CHARTS



LTE1 YZ plane radiation pattern



LTE2 YZ plane radiation pattern



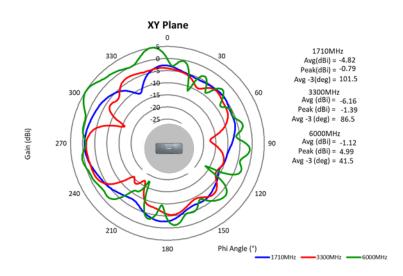
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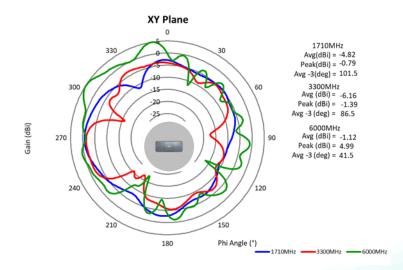
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CHARTS



LTE1 XY plane radiation pattern



LTE2 XY plane radiation pattern



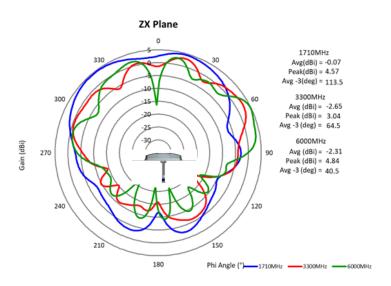
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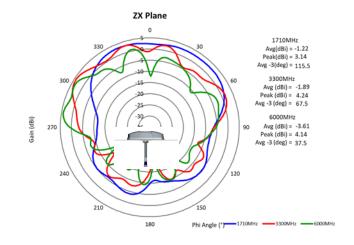
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CHARTS



LTE1 ZX plane radiation pattern



LTE2 ZX plane radiation pattern



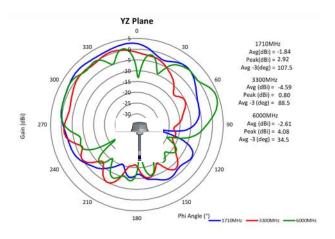
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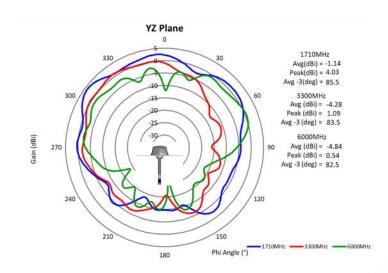
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CHARTS



LTE1 YZ plane radiation pattern



LTE2 YZ plane radiation pattern



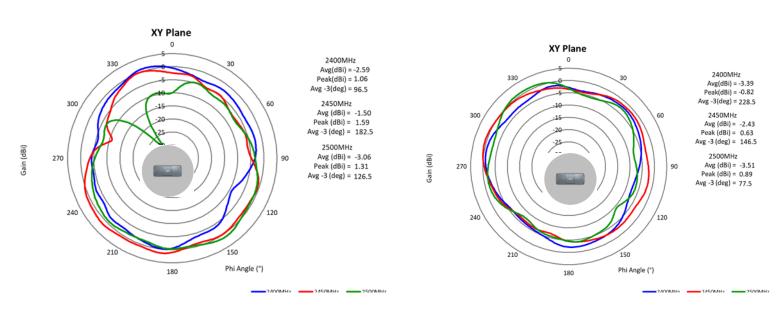
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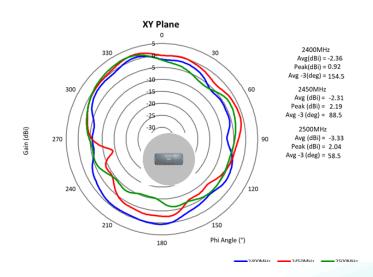
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CHARTS



WiFi1 XY plane radiation pattern

WiFi2 XY plane radiation pattern









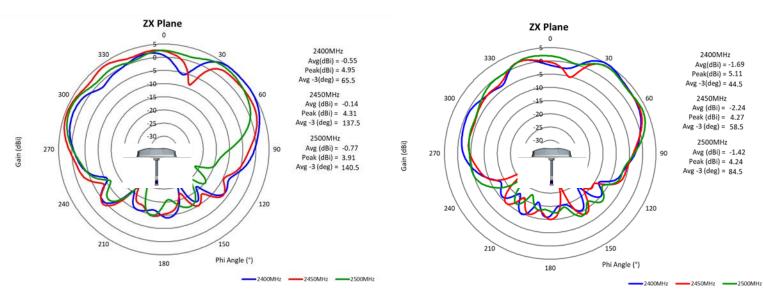
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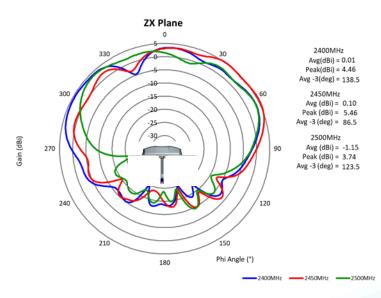
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CHARTS



WiFi1 ZX plane radiation pattern

WiFi2 ZX plane radiation pattern





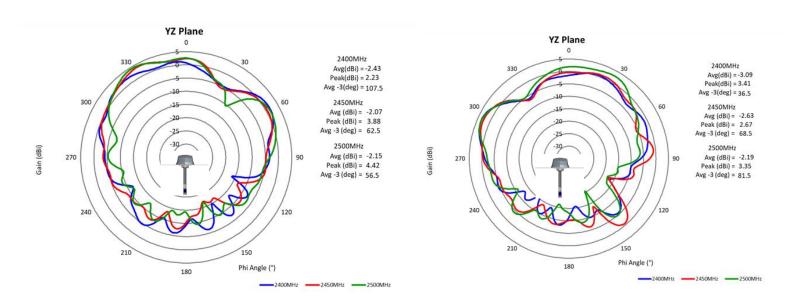
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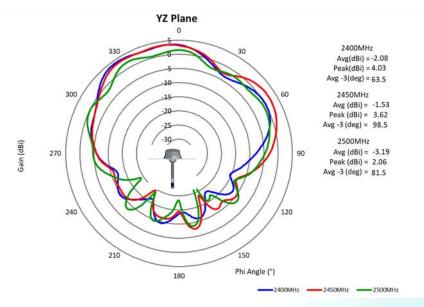
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CHARTS



WiFi1 YZ plane radiation pattern

WiFi2 YZ plane radiation pattern



WiFi3 YZ plane radiation pattern



ROHS



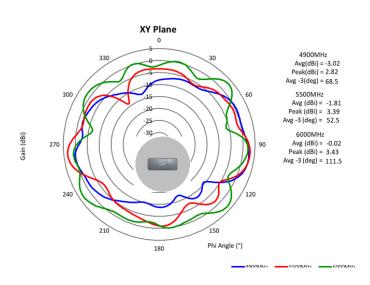
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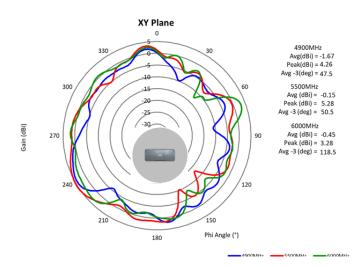
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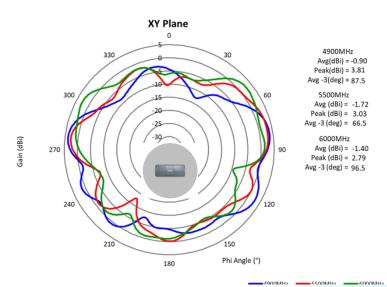
CHARTS





WiFi1 XY plane radiation pattern

WiFi2 XY plane radiation pattern



WiFi3 XY plane radiation pattern



ROHS



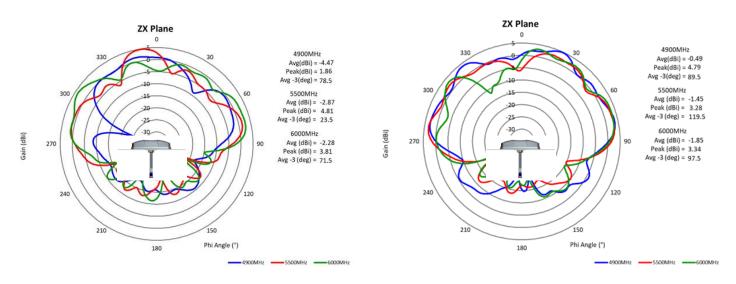
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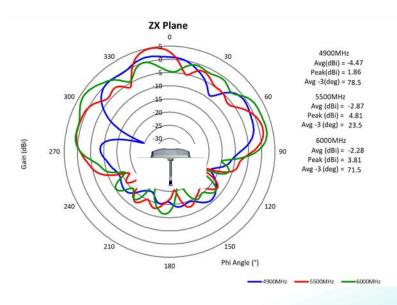
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CHARTS



WiFi1 ZX plane radiation pattern

WiFi2 ZX plane radiation pattern





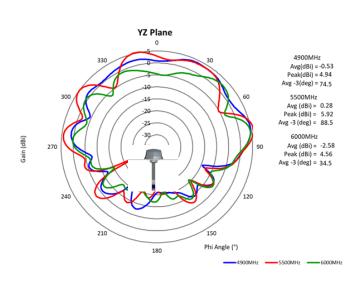
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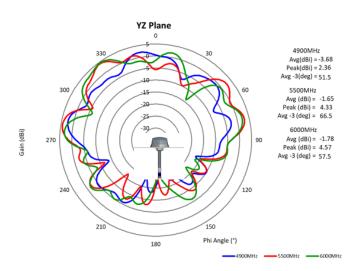
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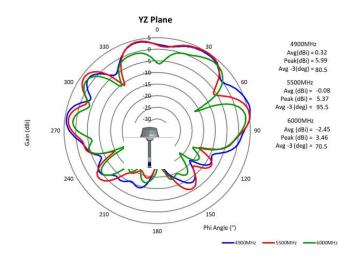
CHARTS





WiFi1 YZ plane radiation pattern

WiFi2 YZ plane radiation pattern





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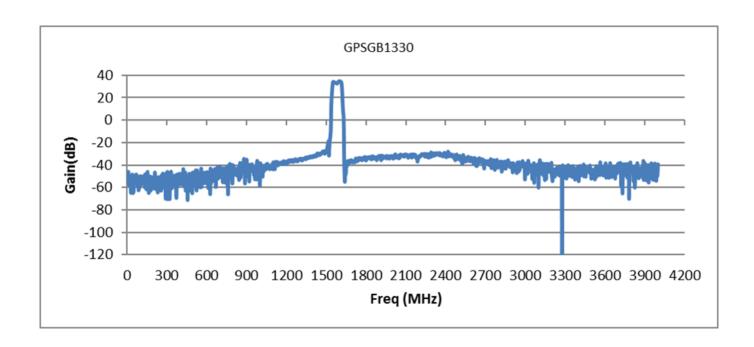
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CHARTS

LNA Gain and out-of-band rejection







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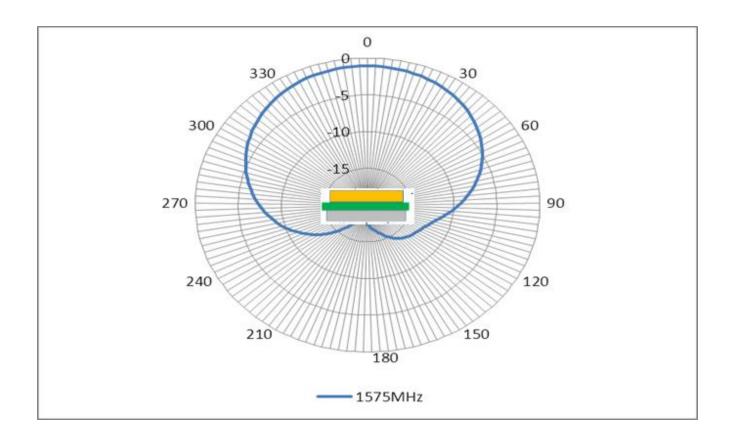
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CHARTS

Radiation Pattern (70mm x 70mm ground plane) GPS & Galileo





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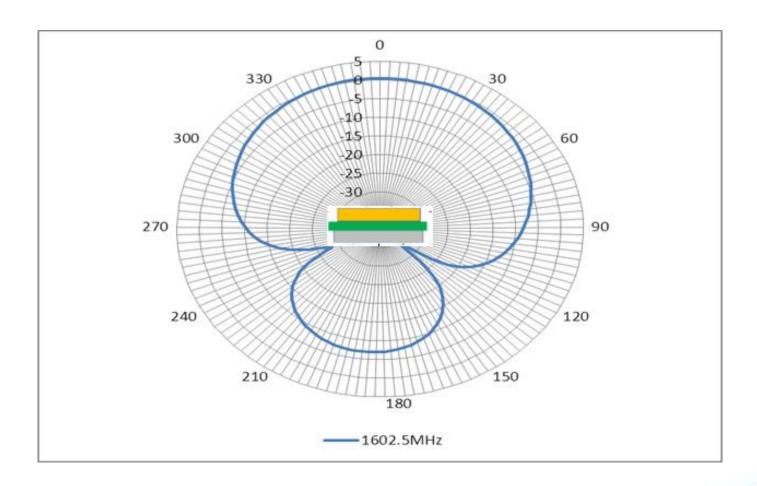
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CHARTS

Radiation Pattern (70mm x 70mm ground plane) GLONASS





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PACKAGING

Each antennas packed in Bubble Bag

6 bags of antennas (Total 6pcs) packed in a cardboard box

1 label on each box with quantity, part number, date code.

单击下面可查看定价,库存,交付和生命周期等信息

>>Pulse(普思)