

Series: ARMADILLO

TECHNICAL DATA SHEET

Description: Vehicular Multiband Antenna with

Direct Mount

PART NUMBER: ARMXXXXXDM





Features:

- Low profile, only 1.8" tall
- Up to 6-lead Configuration
 - LTE(2x) MIMO
 - WiFi(3x) MIMO-|2.4/5.x GHz
 - GPS/GNSS (1x)
- Frequency of Operation:
 - 698-960MHz,1710-2690MHz
 - 2400-2500MHz,5150-5925MHz
 - 1559-1606MHz

Applications:

- Telematics, Navigation
- First Responders(Police, Fire, Ambulance/EMS)
- Energy, Utility, Construction
- Fleet Management
- DSRC(Dedicated Short Range Communications)
- Available Configurations:
 - · Black, White
 - Direct, Magnetic, Adhes.Mount

Issue: 2034

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/Larsen Antennas 18110 SE 34th St Bldg 2 Suite 250 Vancouver, WA 98683 USA Tel: 1-360-944-7551 Europe Headquarters Pulse GmbH & Do, KG Zeppelinstrasse 15 Herrenberg, Germany Tel: 49 7032 7806 0 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



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Description: Vehicular Multiband Antenna with

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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
ARM62311DM	6	2 (with SMA Male)	3 (with RP-SMA Male)	1 (with SMA Male)	Black		
ARM62312DM	6	2 (with SMA Male)	3 (with RP-SMA Male)	1 (with SMA Male)	White		
ARM52211DM	5	2 (with SMA Male)	2 (with RP-SMA Male)	1 (with SMA Male)	Black		
ARM52212DM	5	2 (with SMA Male)	2 (with RP-SMA Male)	1 (with SMA Male)	White	17 FT or 5181mm	
ARM42111DM	4	2 (with SMA Male)	1 (with RP-SMA Male)	1 (with SMA Male)	Black		or 2 Mounting Surface
ARM42112DM	4	2 (with SMA Male)	1 (with RP-SMA Male)	1 (with SMA Male)	White		
ARM32011DM	3	2 (with SMA Male)	0	1 (with SMA Male)	Black		
ARM32012DM	3	2 (with SMA Male)	0	1 (with SMA Male)	White		
ARM21011DM	2	1 (with SMA Male)	0	1 (with SMA Male)	Black		
ARM21012DM	2	1 (with SMA Male)	0	1 (with SMA Male)	White		
ARM21011DMTT	2	1 (with TNC Male)	0	1 (with TNC Male)	Black		
ARM22001DM	2	2 (with SMA Male)	0	0	Black		

Issue: 2034

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Product Numbering

Vehicular Multiband Antenna with Direct Mount

(Part Number)













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	Product ID: ARMADILLO
*	Total Number of Cable leads
1	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: 2034

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Series: ARMADILLO

ELECTRICAL SPECIFICATION	ONS
Frequency	698-960MHz, 1710-2690MHz
	2400-2500MHz, 5150-5925MHz
Nominal Impedance	50 Ω
VSWR*	
698-960MHz	<2.5
1710-2690MHz	<2.5
2400-2500MHz	<2
5150-5925MHz	<2
Isolation*	
698-960MHz, 1710-2690MHz	-8dB
2400-2500MHz, 5150-5925MHz	-12dB
Average Peak Gain**	
698-960MHz;	4.9dBi
1710-2690MHz	5.3dBi
2400-2500MHz	4.6dBi
5150-5925MHz	6.6dBi
Polarization	Vertical

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

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



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ELECTRICAL SPECIFICATIONS

G	P.S	Αr	nte	nna	ì

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

698 MHz >70 dB

960 MHz >65 dB

1710 MHz >60 dB

2170 MHz >65 dB

2400 MHz >65 dB

2700 MHz >65 dB

Noise Figure <2.4 dB

Operating Voltage 3.3 – 5 Vdc

Current Consumption <15mA





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MECHANICAL SPECIFICATIONS

Overall Length 202.3mm X 88.5mm X 45mm

Weight 1.15 Kg

Antenna Color / Material

Connector type

Cable type

Cable length

Black or White
Refer to Page 2
Refer to Page 2
Refer to Page 2

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature $-40 \sim +85^{\circ}$ C Storage Temperature $-40 \sim +85^{\circ}$ 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



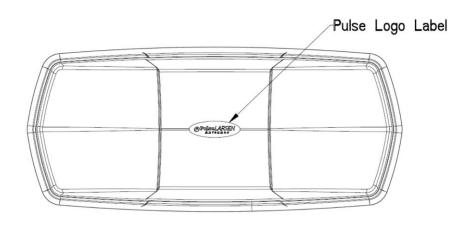
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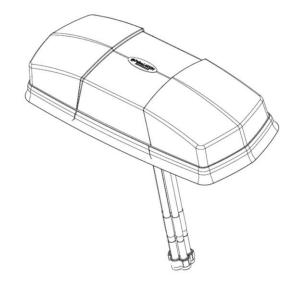
Direct Mount

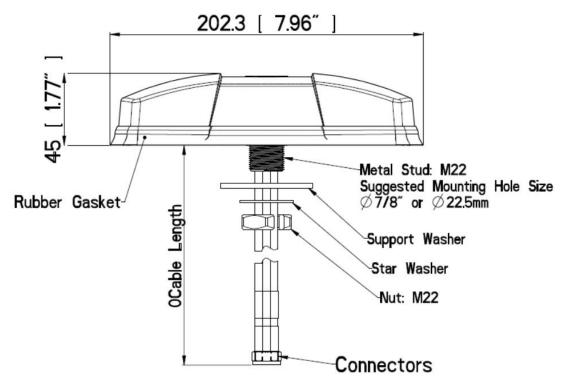
PART NUMBER: ARMXXXXXDM

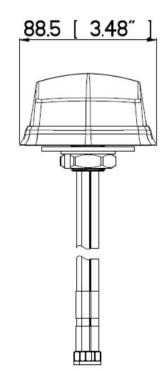
Series: ARMADILLO

MECHANICAL DRAWING











Series: ARMADILLO

TECHNICAL DATA SHEET

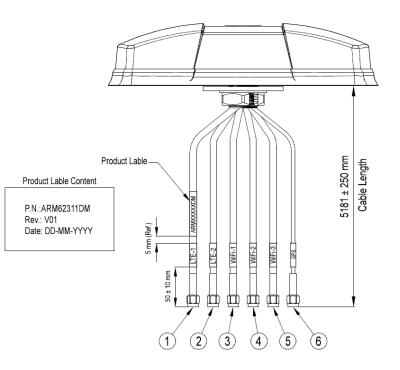
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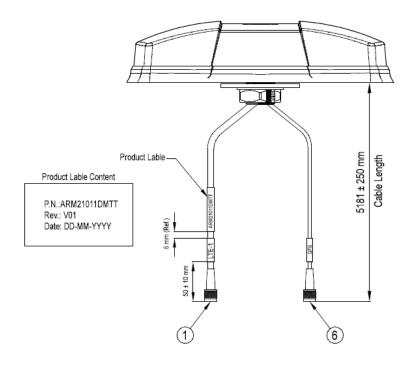
Direct Mount

PART NUMBER: ARMXXXXXDM

ARM21011DMTT

MECHANICAL DRAWING





ARM62311DM		CABLE	CABLE LENGTH	CONNECTOR
1	LTE-1 Cable Assy	LMD 405 *		OMANA
2	LTE-2 Cable Assy	LMR-195 *		SMA Male
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

ARIVIZIUTIDIVITI		CADLE	CABLE LENGTH	CONNECTOR
1	LTE-1 Cable Assy	LMR-195 *		TNO Mala
2		LIVIK-193		TNC Male
3			5181 mm /	
4			204" /	
5			17 FT	
6	GPS Cable Assy	LMR-100*		TNC Male

CARLE

CARLE LENGTH

CONNECTOR

^{*} or equivalent * or equivalent



Description: Vehicular Multiband Antenna with

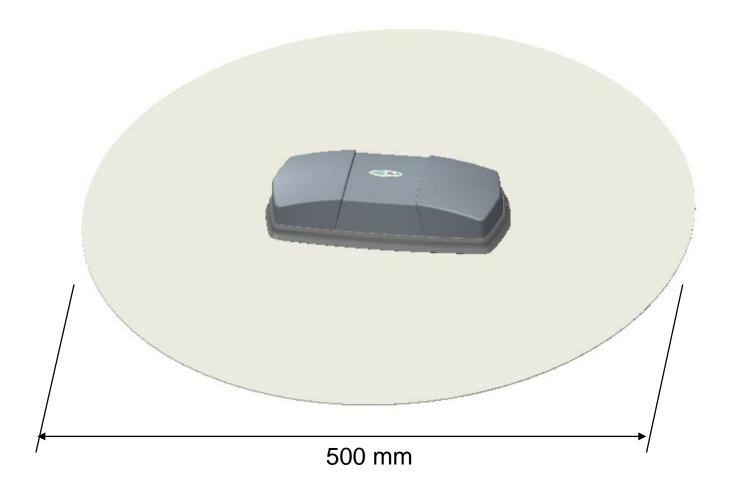
Direct Mount

PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

TEST SETUP

Antenna tested on a Ø500mm ground plane.





Description: Vehicular Multiband Antenna with

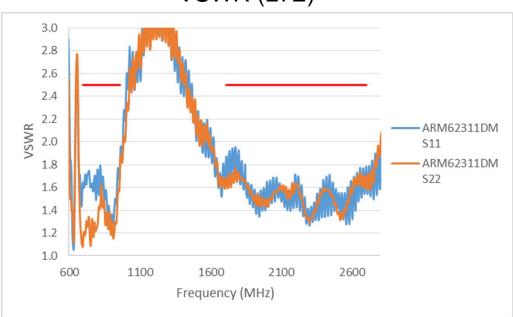
Direct Mount

PART NUMBER: ARMXXXXXDM

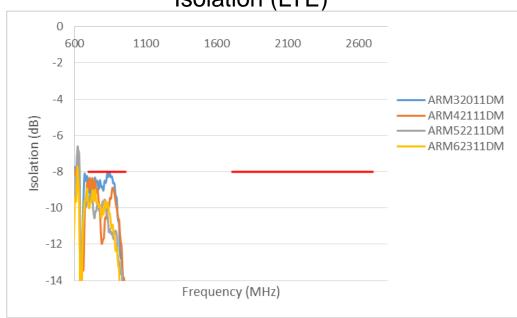
Series: ARMADILLO

CHARTS

VSWR (LTE)



Isolation (LTE)



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

Issue: 2034

ROHS



Description: Vehicular Multiband Antenna with

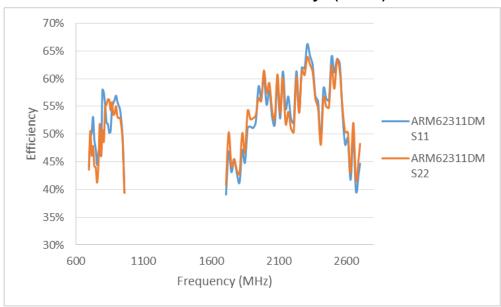
Direct Mount

PART NUMBER: ARMXXXXXDM

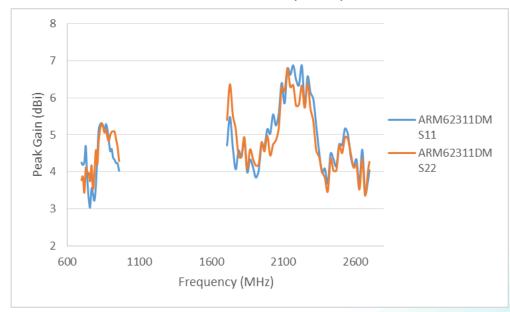
Series: ARMADILLO

CHARTS

Radiation Efficiency (LTE)



Peak Gain (LTE)



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

Issue: 2034

ROHS



Description: Vehicular Multiband Antenna with

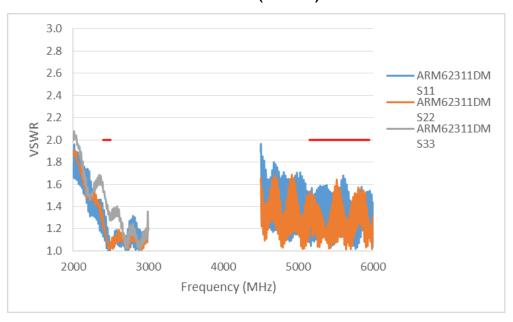
Direct Mount

PART NUMBER: ARMXXXXXDM

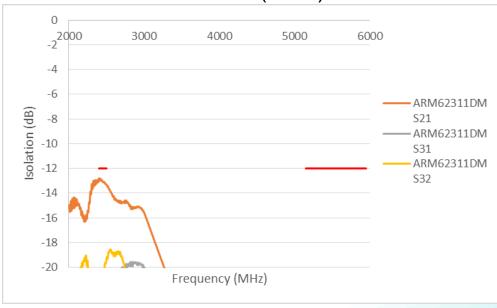
Series: ARMADILLO

CHARTS

VSWR (WIFI)



Isolation (WIFI)



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

Issue: 2034



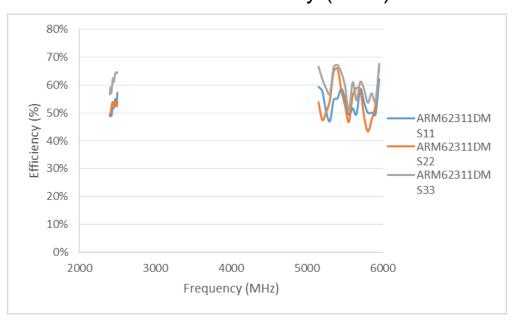
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Direct Mount

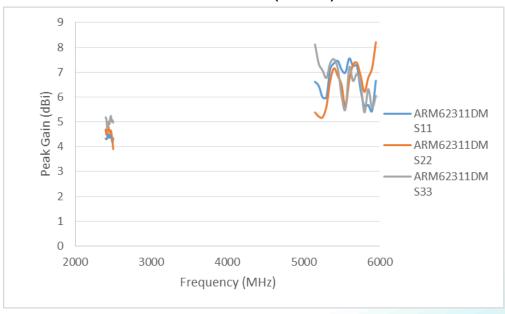
PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

CHARTS Radiation Efficiency (WIFI)



Peak Gain (WIFI)



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



ROHS



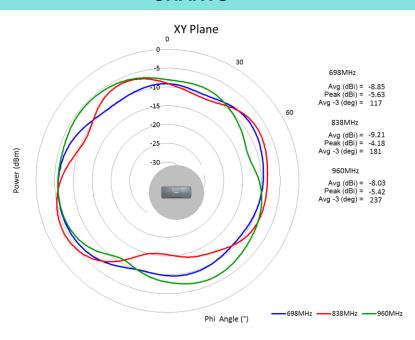
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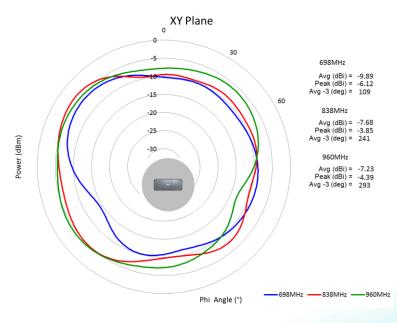
PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

CHARTS



LTE1 XY plane radiation pattern



LTE2 XY plane radiation pattern





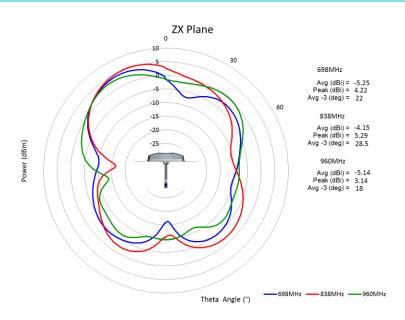
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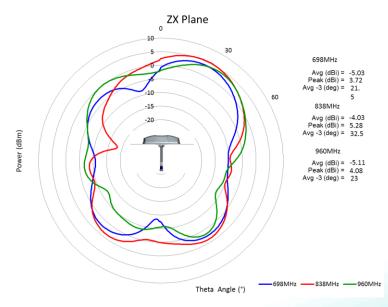
PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

CHARTS



LTE1 ZX plane radiation pattern



LTE2 ZX plane radiation pattern







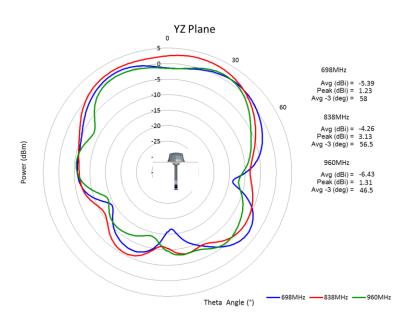
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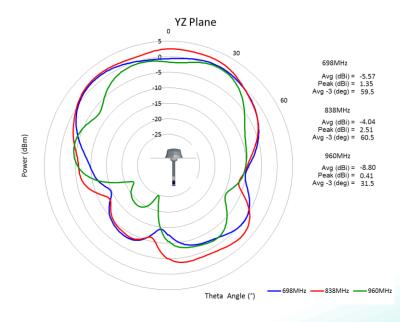
PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

CHARTS



LTE1 YZ plane radiation pattern



LTE2 YZ plane radiation pattern



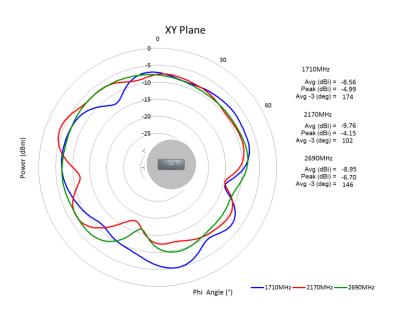
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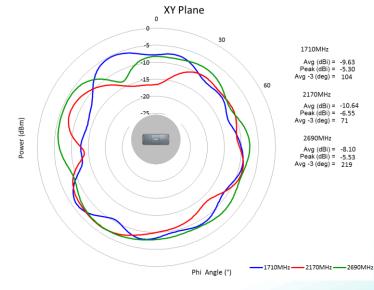
PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

CHARTS



LTE1 XY plane radiation pattern



LTE2 XY plane radiation pattern



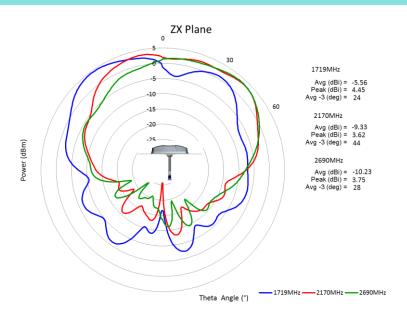
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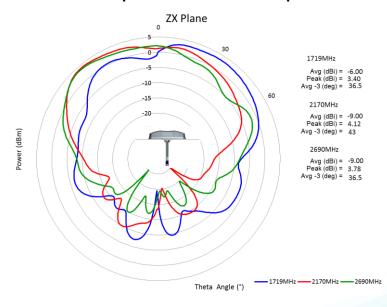
PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

CHARTS



LTE1 ZX plane radiation pattern



LTE2 ZX plane radiation pattern



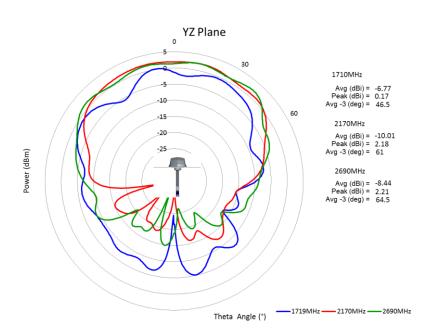
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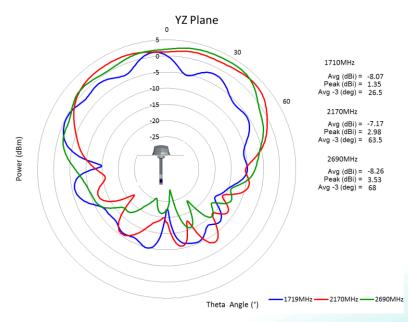
PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

CHARTS



LTE1 YZ plane radiation pattern



LTE2 YZ plane radiation pattern



Series: ARMADILLO

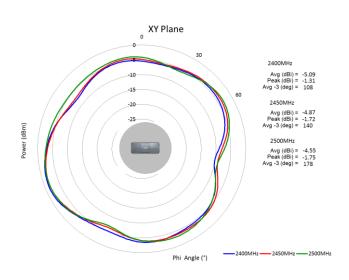
TECHNICAL DATA SHEET

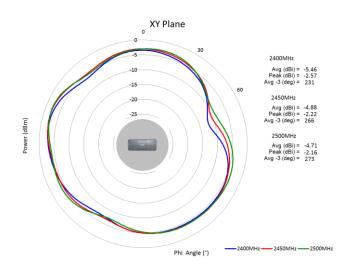
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PART NUMBER: ARMXXXXXDM

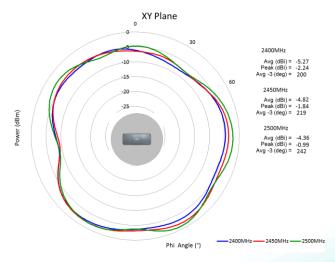
CHARTS





WiFi1 XY plane radiation pattern

WiFi2 XY plane radiation pattern



WiFi3 XY plane radiation pattern







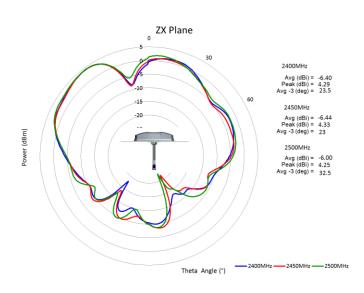
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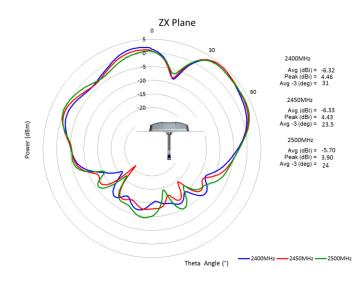
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Series: ARMADILLO

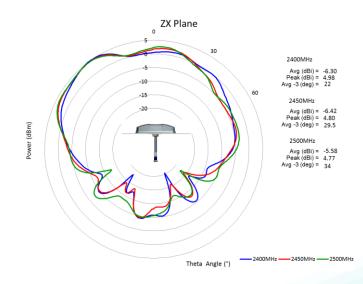
CHARTS





WiFi1 ZX plane radiation pattern

WiFi2 ZX plane radiation pattern



WiFi3 ZX plane radiation pattern



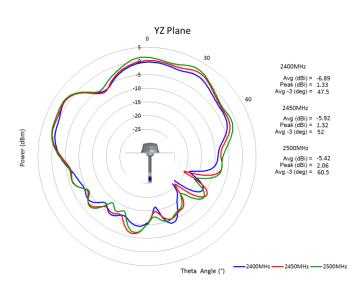
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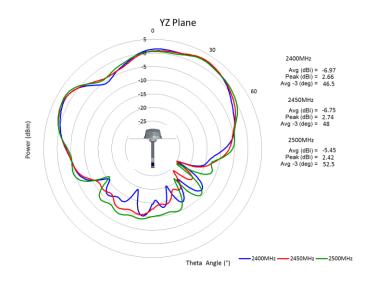
Direct Mount

PART NUMBER: ARMXXXXXDM

Series: ARMADILLO

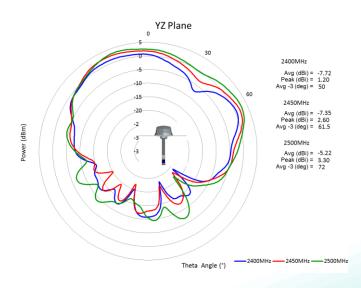
CHARTS





WiFi1 YZ plane radiation pattern

WiFi2 YZ plane radiation pattern



WiFi3 YZ plane radiation pattern



ROHS



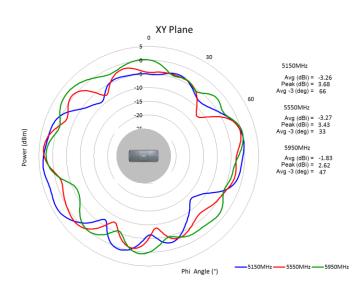
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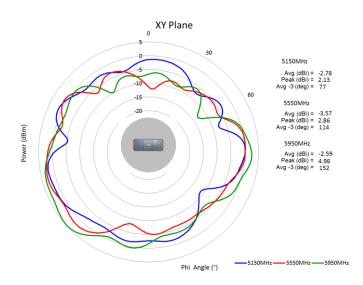
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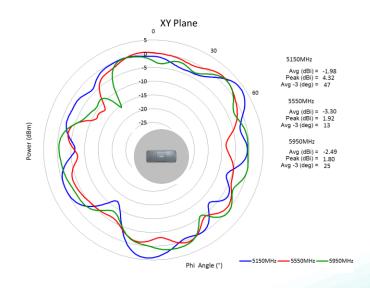
CHARTS





WiFi1 XY plane radiation pattern

WiFi2 XY plane radiation pattern



WiFi3 XY plane radiation pattern

Issue: 2034

ROHS



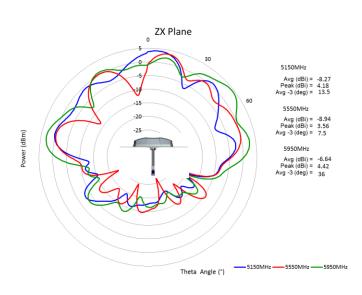
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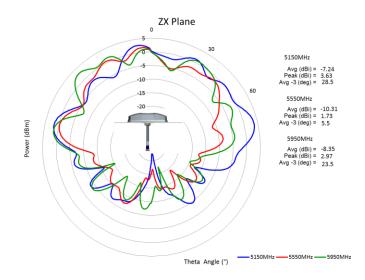
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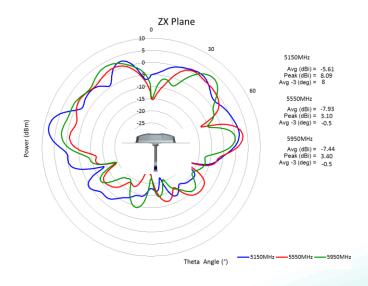
CHARTS





WiFi1 ZX plane radiation pattern

WiFi2 ZX plane radiation pattern



WiFi3 ZX plane radiation pattern



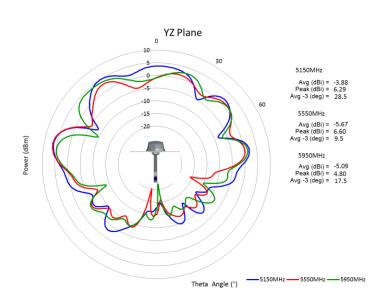
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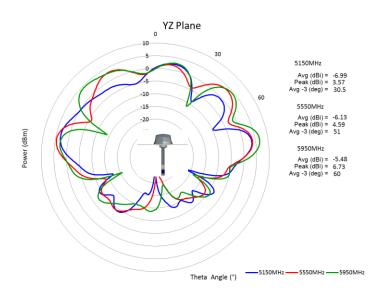
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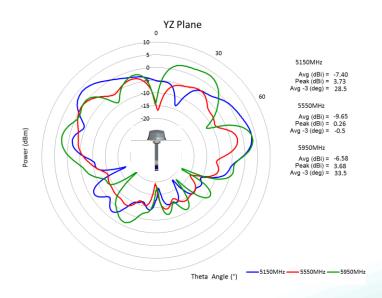
CHARTS





WiFi1 YZ plane radiation pattern

WiFi2 YZ plane radiation pattern



WiFi3 YZ plane radiation pattern



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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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Antennas category:

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Other Similar products are found below:

GAN30084EU 930-033-R GW17.07.0250E 1513563-1 EXE902SM APAMPG-117 MAF94383 W3908B0100 W6102B0100 YE572113-30RSMM 108-00014-50 66089-2406 SPDA17RP918 A09-F8NF-M A09-F5NF-M RGFRA1903041A1T W3593B0100 W3921B0100 SIMNA-868 SIMNA-915 SIMNA-433 W1044 W1049B090 A75-001 WTL2449CQ1-FRSMM CPL9C EXB148BN 0600-00060 TRA9020S3PBN-001 Y4503 GD5W-28P-NF MA9-7N GD53-25 GD5W-21P-NF C37 MAF94051 MA9-5N EXD420PL B1322NR QWFTB120 MAF94271 MAF94300 GPSMB301 FG4403 AO-AGSM-OM54 5200232 MIKROE-2349 WCM.01.0111 MIKROE-2393 MIKROE-2352