

TECHNICAL DATA SHEET

Description: Vehicular Multiband Antenna with

Magnetic Mount

PART NUMBER: ARMXXXXXMM



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
 - Magnetic mount
 - For direct mount seep/N: ARMXXXXXDM



Issue: 2051

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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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	Mounting
ARM62311MM	6	2	3	1	Black	
ARM62312MM	6	2	3	1	White	Magnetic Mount; Pull Force: 100N, 22lbf min. (Tested on 3mm thick steel plate)
ARM52211MM	5	2	2	1	Black	
ARM52212MM	5	2	2	1	White	
ARM42111MM	4	2	1	1	Black	
ARM42112MM	4	2	1	1	White	
ARM22001MM	2	2	0	0	Black	
ARM22002MM	2	2	0	0	White	

Product Numbering

Vehicular Multiband Antenna with Direct Mount

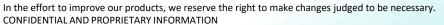
(Part Number) ARM X X X X MV

(1)	Product ID: ARMADILLO
_	
@	Total Number of Cable leads
@	Total Number of LTE Cable Leads
	Total Number of WiFi Cable Leads
49	Total Number of GPS Cable Leads
	The Color of the Plastic Housing
•	1=Black; 2= White
@	Mounting: Magnetic Mount

	ARMXXXXXMM	CABLE	CABLE LENGTH	CONNECTOR
1	LTE-1 Cable Assy			SMA Male
2	WiFi-1 Cable Assy	LMR-195 *	5181 mm / 204" / 17 FT	RP-SMA Male
3	WiFi-3 Cable Assy	LIVIR-190		RP-SMA Male
4	WiFi-2 Cable Assy			RP-SMA Male
5	GPS Cable Assy	LMR-100 *		SMA Male
6	LTE-2 Cable Assy	LMR-195 *		SMA Male

^{*} or equivalent

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ELECTRICAL SPECIFICATIONS				
Frequency	698-960MHz, 1710-2690MHz			
	2400-2500MHz, 5150-5925MHz			
Nominal Impedance	50 Ω			
VSWR*				
698-960MHz	<2.5			
1710-2690MHz	<2.5			
2400-2500MHz	<2.5			
5150-5925MHz	<2.5			
Isolation*				
698-960MHz, 1710-2690MHz	-8dB			
2400-2500MHz, 5150-5925MHz	-12dB			
Radiation Pattern	Omni			
Average Peak Gain**				
698-960MHz	4.6dBi			
1710-2690MHz	5dBi			
2400-2500MHz	4.1dBi			
5150-5925MHz	6.3dBi			
Polarization	Vertical			

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

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

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 1.1 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

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



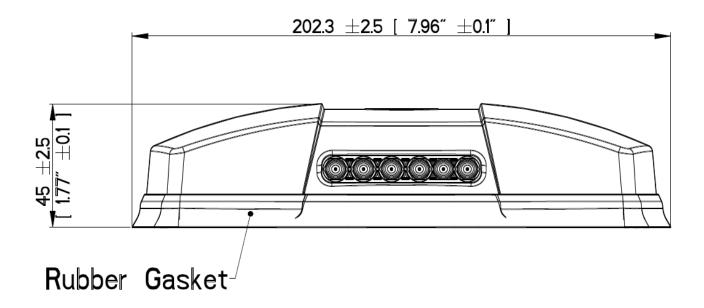
TECHNICAL DATA SHEET

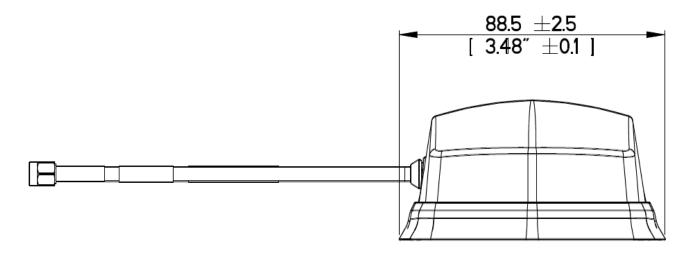
Description: Vehicular Multiband Antenna with

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PART NUMBER: ARMXXXXXMM

MECHANICAL DRAWING







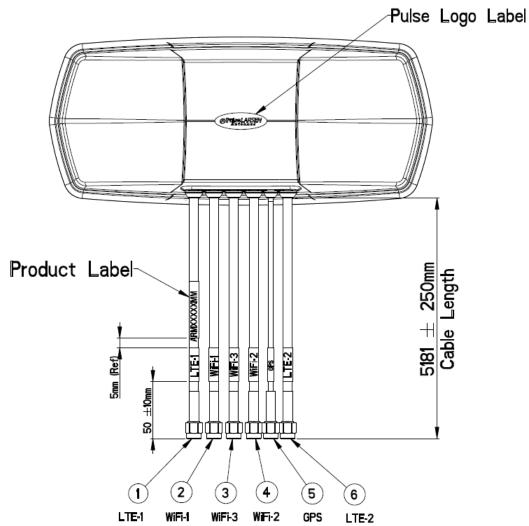
TECHNICAL DATA SHEET

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MECHANICAL DRAWING



ARMXXXXXMM		CABLE	CABLE LENGTH	CONNECTOR
1	LTE-1 Cable Assy		5181 mm / 204" /	SMA Male
2	WiFi-1 Cable Assy	LMR-195 *		RP-SMA Male
3	WiFi-3 Cable Assy	LIVIK-190		RP-SMA Male
4	WiFi-2 Cable Assy			RP-SMA Male
5	GPS Cable Assy	LMR-100 *	17 FT	SMA Male
6	LTE-2 Cable Assy	LMR-195 *		SMA Male

Issue: 21 * or equivalent

KOHS



TECHNICAL DATA SHEET

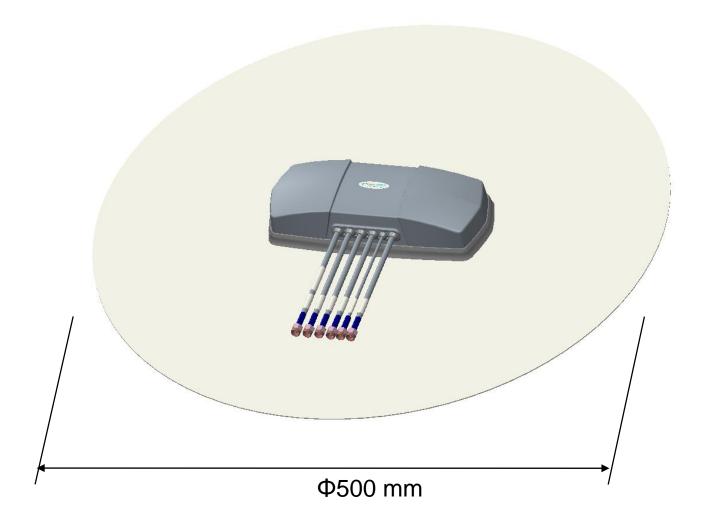
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TEST SETUP

Antenna tested on a Φ500mm ground plane.







TECHNICAL DATA SHEET

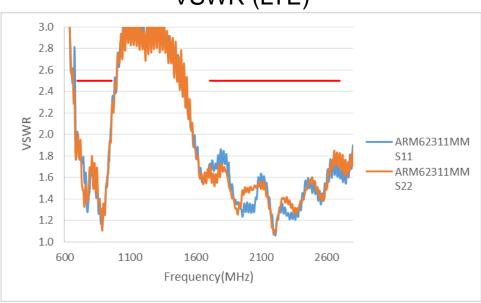
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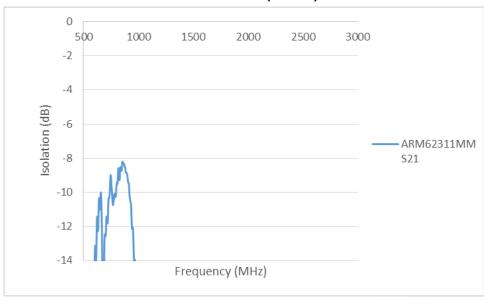
PART NUMBER: ARMXXXXXMM

CHARTS

VSWR (LTE)



Isolation (LTE)



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





TECHNICAL DATA SHEET

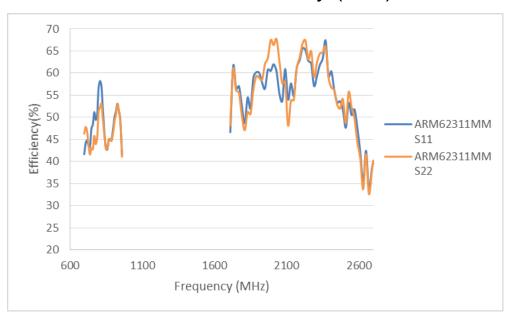
Description: Vehicular Multiband Antenna with

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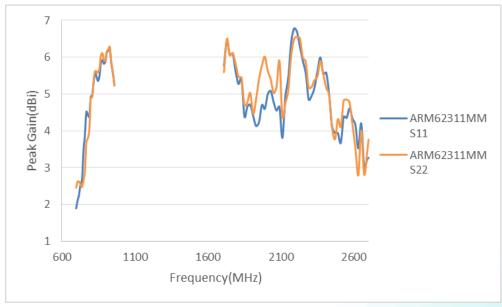
PART NUMBER: ARMXXXXXMM

CHARTS

Radiation Efficiency (LTE)



Peak Gain (LTE)



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



TECHNICAL DATA SHEET

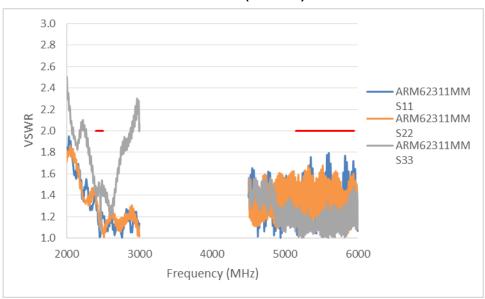
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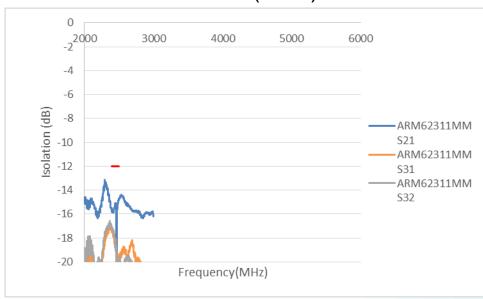
PART NUMBER: ARMXXXXXMM

CHARTS

VSWR (WIFI)



Isolation (WIFI)



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





TECHNICAL DATA SHEET

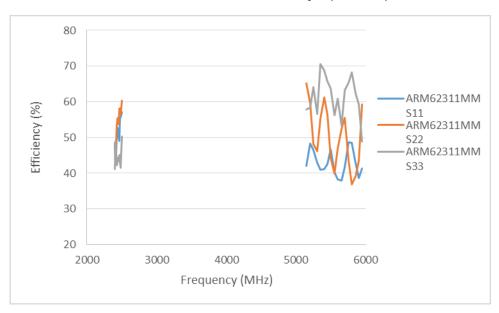
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Magnetic Mount

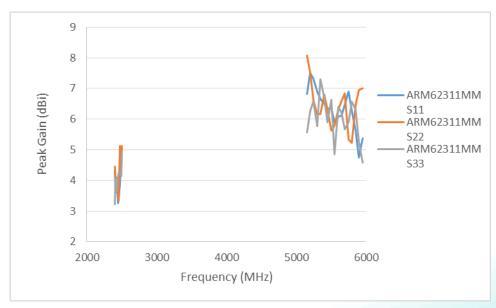
PART NUMBER: ARMXXXXXMM

CHARTS

Radiation Efficiency (WIFI)



Peak Gain (WIFI)



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





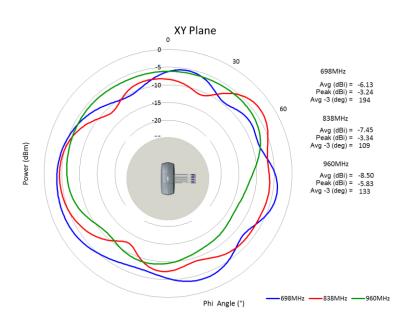
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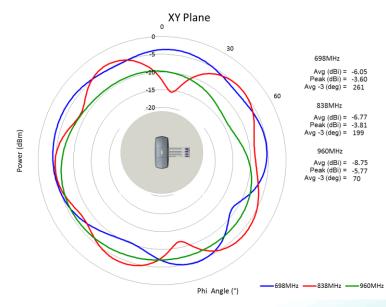
Magnetic Mount

PART NUMBER: ARMXXXXXMM

CHARTS



LTE1 XY plane radiation pattern



LTE2 XY plane radiation pattern





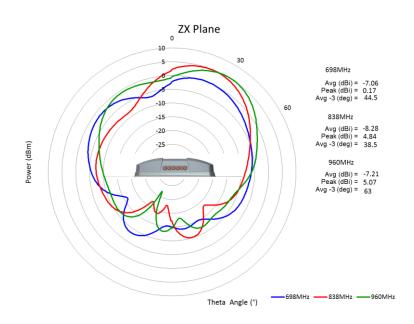
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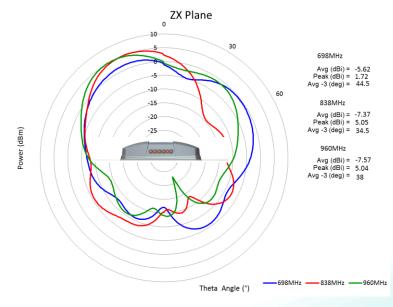
Magnetic Mount

PART NUMBER: ARMXXXXXMM

CHARTS



LTE1 ZX plane radiation pattern



LTE2 ZX plane radiation pattern





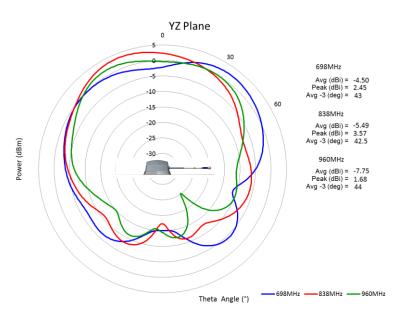
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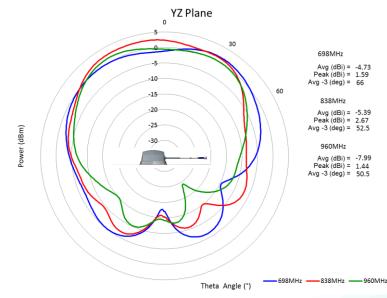
Magnetic Mount

PART NUMBER: ARMXXXXXMM

CHARTS



LTE1 YZ plane radiation pattern



LTE2 YZ plane radiation pattern



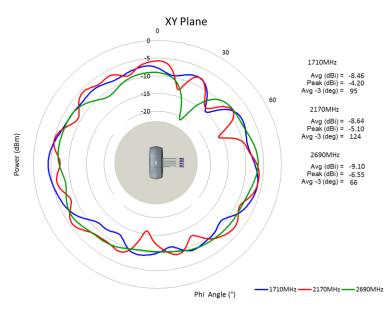
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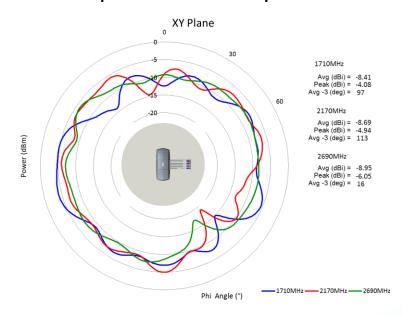
Magnetic Mount

PART NUMBER: ARMXXXXXMM

CHARTS



LTE1 XY plane radiation pattern



LTE2 XY plane radiation pattern



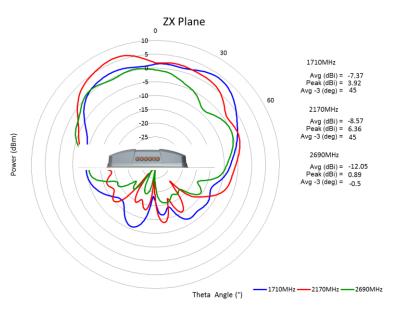
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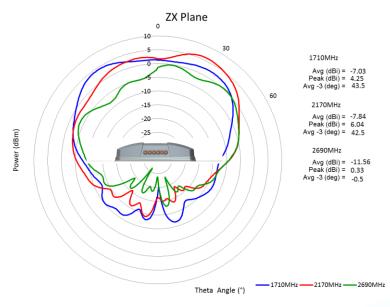
Magnetic Mount

PART NUMBER: ARMXXXXXMM

CHARTS



LTE1 ZX plane radiation pattern



LTE2 ZX plane radiation pattern



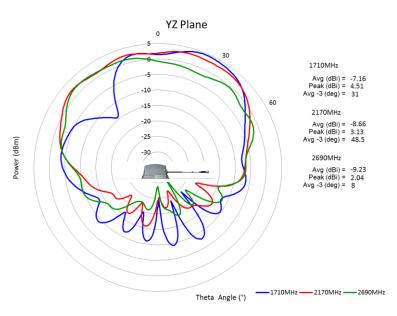
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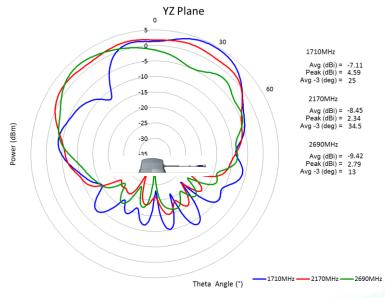
Magnetic Mount

PART NUMBER: ARMXXXXXMM

CHARTS



LTE1 YZ plane radiation pattern



LTE2 YZ plane radiation pattern





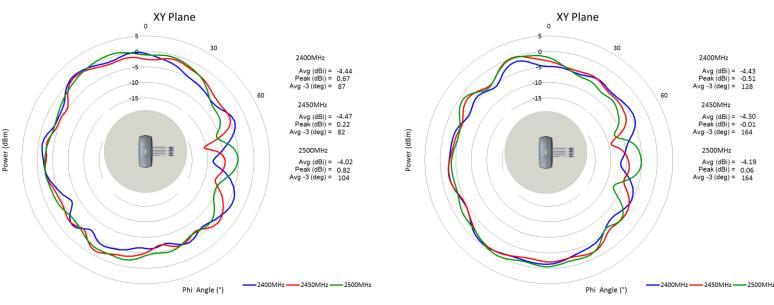
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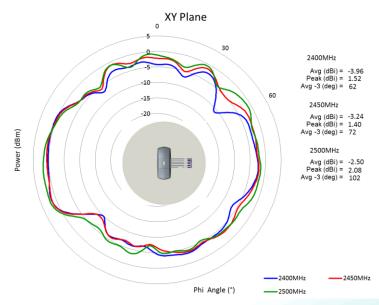
PART NUMBER: ARMXXXXXMM





WiFi1 XY plane radiation pattern

WiFi2 XY plane radiation pattern



WiFi3 XY plane radiation pattern



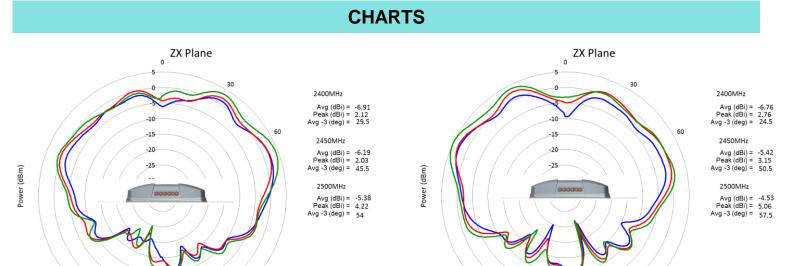


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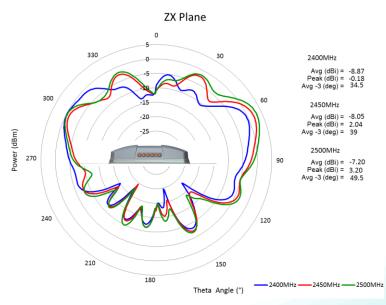
-2450MHz --- 2500MH:

WiFi1 ZX plane radiation pattern

Theta Angle (°)

WiFi2 ZX plane radiation pattern

Theta Angle (°)



WiFi3 ZX plane radiation pattern

2400MHz -

-2450MHz --- 2500MH:

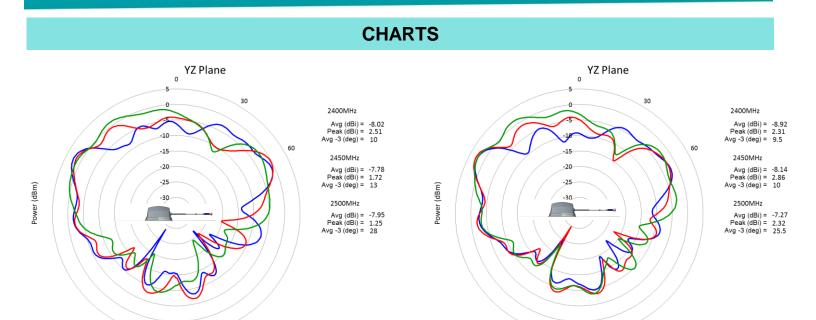


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WiFi1 YZ plane radiation pattern

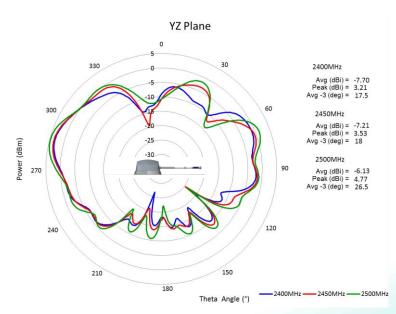
Theta Angle (°)

2400MHz •

- 2450MHz --- 2500MH:

WiFi2 YZ plane radiation pattern

Theta Angle (°)



WiFi3 YZ plane radiation pattern

2400MHz -

- 2450MHz --- 2500MH:



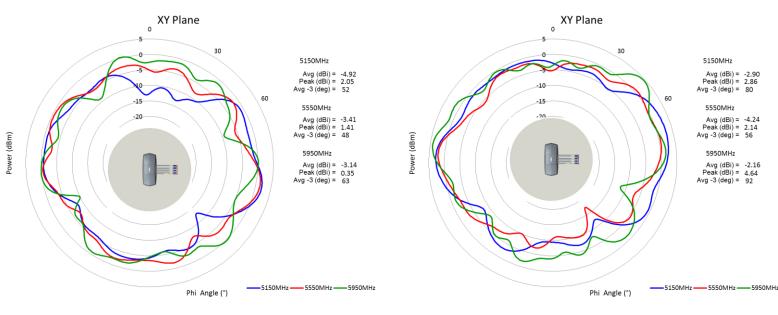
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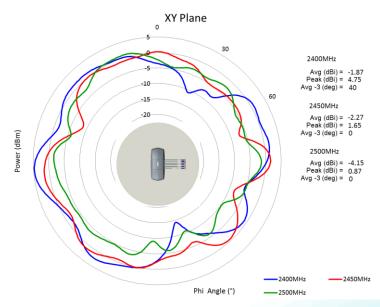
PART NUMBER: ARMXXXXXMM





WiFi1 XY plane radiation pattern

WiFi2 XY plane radiation pattern



WiFi3 XY plane radiation pattern



5150MHz

5550MHz

5950MHz

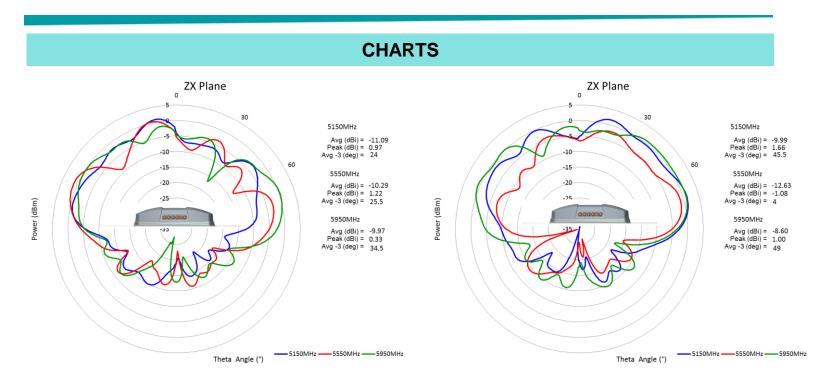


TECHNICAL DATA SHEET

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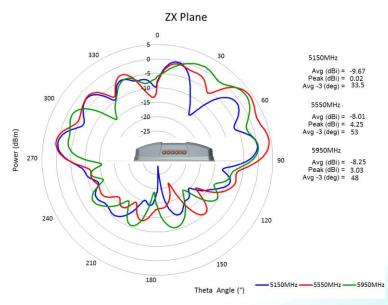
Magnetic Mount

PART NUMBER: ARMXXXXXMM



WiFi1 ZX plane radiation pattern

WiFi2 ZX plane radiation pattern



WiFi3 ZX plane radiation pattern

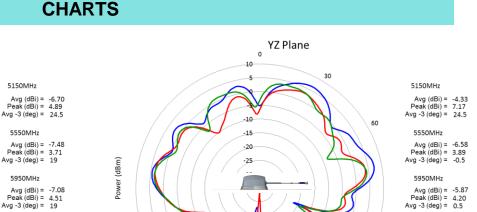


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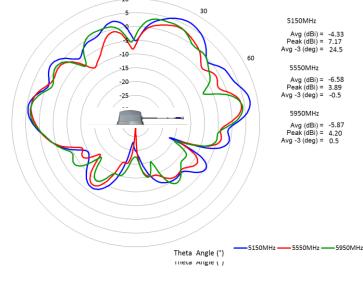
-5150MHz -- 5550MHz --- 5950MHz Theta Angle (°)

YZ Plane

-20 -25

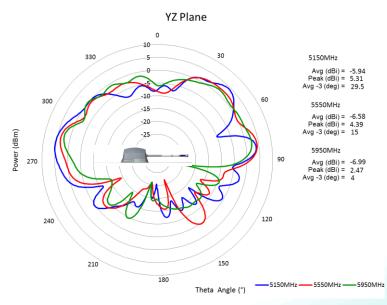
-30

ower (dBm)



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.

单击下面可查看定价,库存,交付和生命周期等信息

>>Pulse(普思)