

MP Antenna, LTD. 147 Eady Court Elyria, Ohio 44035

440.387.5968 phone 440.545.3500 fax www.mpantenna.com sales@mpantenna.com

#### Part Number: 08-ANT-1117-5X-BCCBB1

model number: 08-ANT-1117 product description: 1X GPS, 2X WiFi(Dual Band, WiFi 6), 2X Cellular

#### **Electrical Data**

#### **Environmental Data**

frequency range:	600-6000MHz, 2.4-2.5GHz,	environmental cond.:	Outdoor/Indoor
	4.9-6GHz, GPS	operation temperature:	-40 to 85 deg C
gain:	See Chart	storage temperature:	-40 to 85 deg C
vswr:	See Chart	transport temperature:	-40 to 85 deg C
horizontal pattern type:	Omni Directional	IP Rating:	IP67
vertical patter type:	Hemispheric	Rohs - Reach	Compliant
ground plane:	Built In		

#### **General Data**

# color:Blackantenna feeds:Fivecoax length:1 ftcoax type:See Drawingconnector type:SMA Male(3x), SMAfemale(2x)Female(2x)polarization:Multi-Polarizedpower:50 Watts Inputimpedance:50 ohms Nominalconstruction:UV Stabilized ASAgasket:Contour Matching, TPEGasketGasket

#### Mechanical Data

length:	6.1 in
width:	6.1 in
radome height:	4.9 in
total height:	See Drawing
mounting type:	Connector
hardware included:	Nut, Washer

#### **GPS** Antenna

frequency band:	1559-1608MHz
amplifier gain:	@3.0 VDC:26dB (typical)
output vswr:	2.0:1 (maximum)
DC voltage:	2.8-6.0 V (operating)
noise figure:	<2.0 dB
out-of-band rejection:	1586 +/- 50MHz >60 dBc
	1586 +/- 60MHz >70 dBc
nominal gain:	3dBic
polarization:	<b>Right Hand Circular</b>
nominal impedance:	50 Ohms



\* With built in spatial and polarization diversity, performance in obstructed environments is greater than that of standard antennas with similar or higher laboratory gains.

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	F1 (MHz)	F2 (MHz)	SWR	Max dBi	Typical dB	Range (+/-) dB	Avg Efficenc	Range (+-)	Polarization	Nominal Impedance	Max Power
LTE1											
	617	698	2.8	3.2	2.2	1	30	5	Multi-Polarized	50	50
	733	802	2.4	4.7	3.1	1.6	35	4	Multi-Polarized	50	50
	824	960	1.7	3.3	2.8	0.5	62	8	Multi-Polarized	50	50
	1805	2200	1.7	3.2	2.8	0.6	52	3	Multi-Polarized	50	50
	2300	2690	1.9	3.5	3.1	0.5	47	1	Multi-Polarized	50	50
	3400	3800	2	5.9	3.9	1.6	42	2	Multi-Polarized	50	50
	5150	5950	1.5	7.5	6.3	1.1	60	4	Multi-Polarized	50	50
LTE 2											
	617	698	2.8	4.3	3.1	0.9	30	5	Multi-Polarized	50	50
	698	802	2.4	4.3	3.5	0.5	33	5	Multi-Polarized	50	50
	824	960	1.7	3.2	2.6	0.5	40	2	Multi-Polarized	50	50
	1710	2200	1.7	3.4	3	0.4	63	3	Multi-Polarized	50	50
	2300	2690	1.9	5	3.8	1.5	52	4	Multi-Polarized	50	50
	3400	3800	2	5.5	4.5	1	44	1	Multi-Polarized	50	50
	5150	5950	1.5	7.4	6.2	1.2	63	2	Multi-Polarized	50	50
Wifi											
	2400	2500	1.3	3	2.1	0.9	54	3	Multi-Polarized	50	50
	4900	5900	1.6	4.0*	2.9*	1.2	72	5	Multi-Polarized	50	50
Wifi											
	2400	2500	1.3	3	2.1	0.9	54	3	Multi-Polarized	50	50
	4900	5900	1.6	4.0*	2.6*	1.2	72	5	Multi-Polarized	50	50
				*When conr	nected using a	minimum 12 Feet	of MPA200FX	(coax			

## Min. Isolation (dB):

		· · /			
	LTE 1	-2	Wifi (3,4)		
LTE (1,2)	617-960 MHz	7.8	617-960 MHz	23	
	1.71-2.7 GHz	14.3	1.71-2.7 GHz	12.1	
	3.3-5.9 GHz	22.4	3.3-5.9 GHz	23.4	
Wifi (3-4)			2.4-2.5 GHz	-16.1	
			4.9-6.0 GHz	-23.4	

Iinimum Mounting					$\nabla$				
Hole Diameter	Max Mou Hole Diai	-	Max Mo Surface T		Color				
0.76 Inches	1.0 Inc	hes	0.5 In	iches	Black	ζ		$\frown$	
					mp#		~ Ø6.1		
			4.1 0.9				— 200 Series Coax (Unless N See Table for Feed Numbe	oted in Table) r, Lengths,	Ą
Feed Number	Freque	ncv	Lenath	of Coax	Connec	tor			
1					ies Coax) SMA Male (Cut Nut Included SMA Female				
2	Dual Band, 2.4 GH	Iz 4.9-6 GHz	1 F	oot					
3	Dual Band, 2.4 GH	Iz 4.9-6 GHz	1 F	oot			-		
4	600-6000	) MHz	1 Foot		SMA Male		-		
5	600-6000	) MHz	1 F	oot	SMA M	ale	-		
MP ANTENNA, LTD. 147 Eady Court Elyria, Ohio 44035 www.mpantenna.com		AME DAT	E	THE INFORMATION DRAWING IS THE S ANTENNA, LTD. AN PART OR AS A WH WRITTEN PERMISS	N CONTAINED IN THIS SOLE PROPERTY OF MP IY REPRODUCTION IN OLE WITHOUT THE SION OF MP ANTENNA			PART NO. 08-ANT-1117-5X-BCCBB1	
	0.76 Inches Feed Number 1 2 3 4 5 MP ANTENNA, LTD. 147 Eady Court Elyria, Ohio 44035	0.76 Inches         1.0 Inc           0.76 Inches         1.0 Inc           Image: Stress of the stress o	0.76 Inches         1.0 Inches           0.76 Inches         1.0 Inches           Second Se	0.76 Inches         1.0 Inches         0.5 In           0.76 Inches         1.0 Inches         0.5 In           4.1         4.1         4.1           4.1         4.1         4.1           0.9         1         0.9           1         GPS         1 Foot (100 Stress)           2         Dual Band, 2.4 GHz 4.9-6 GHz         1 Ford (100 Stress)           3         Dual Band, 2.4 GHz 4.9-6 GHz         1 Frequency           4         600-6000 MHz         1 Frequency	0.76 Inches       1.0 Inches       0.5 Inches         0.76 Inches       1.0 Inches       0.5 Inches         0.76 Inches       0.5 Inches       0.5 Inches         0.76 Inches       0.76 Inches       0.76 Inches         0.76 Inches       0.77 Inches       0.77 Inches         0.77 Inches       0.77 Inches       0.77 Inches         Feed Number       Frequency       Length of Coax         1       GPS       1 Foot (100 Series Coax)         2       Dual Band, 2.4 GHz 4.9-6 GHz       1 Foot         3       Dual Band, 2.4 GHz 4.9-6 GHz       1 Foot         4       600-6000 MHz       1 Foot         5       600-6000 MHz       1 Foot         147 Eady Court       Inches       Inches         Internormation       Inches       Inches         MP ANTENNA, LTD.       Internormation       Internormation         147 Eady Court       Internormation       Internormation         Internormation       Internormation       Internormation         Internormation       Inte	0.76 Inches     1.0 Inches     0.5 Inches     Black       1     0.9     1.0 Inches     0.9       1     GPS     1 Foot (100 Series Coax)     SMA M       2     Dual Band, 2.4 GHz 4.9-6 GHz     1 Foot     SMA Fer       3     Dual Band, 2.4 GHz 4.9-6 GHz     1 Foot     SMA M       5     600-6000 MHz     1 Foot     SMA M       5     MOLE     DMENSIONS ARE IN INCHES     PROPRIETARY AND CONFIDENTIAL THEND SA WHEED WHEND IN THE       WWW TOBARTENNAL DITAL     NAME     DATE     PROPRIETARS ON OF MFA MEED IN THE	0.76 Inches     1.0 Inches     0.5 Inches     Black       Image: Constraint of the second	0.76 Inches       1.0 Inches       0.5 Inches       Black         0.76 Inches       0.9       0.1       0.1         1       0.9       0.9       0.9       0.9         200 Series Coax (Unless N) See Table for Feed Number Connectors, and Frequency       Note: Mounting Hardware Connectors, and Frequency         1       GPS       1 Foot (100 Series Coax)       SMA Male         2       Dual Band, 24 GHz 49.6 GHz       1 Foot SMA Female         3       Dual Band, 24 GHz 49.6 GHz       1 Foot SMA Female         4       600-6000 MHz       1 Foot SMA Male         5       600-6000 MHz       1 Foot SMA Male         147 Eddy Count Environments of SMA Male       Inches NMA Series NMA Male         MPP ANTENNA, LTD.       TAVELE N MCNESS       MAR Male NMA Male         MP ANTENNA, LTD.       Inches NAM Series Norther Series Nort	0.76 Inches       1.0 Inches       0.5 Inches       Black         0.76 Inches       0.6 Inches       0.6 Inches       0.6 Inches       0.6 Inches         0.76 Inches       0.6 Inches       0.6 Inches       0.6 Inches       0.6 Inches       0.6 Inches         0.76 Inches       0.6 Inches       0.6 Inches       0.6 Inches       0.6 Inches       0.6 Inches       0.6 Inches         1       0.8 Inches       1 Foot (100 Barries Coax)       SMA Male       Note: Mounting Hardware Cut Nut and Cut Washer) Included         1       1 Included       1 Foot       SMA Female       Note: Mounting Hardware Cut Nut and Cut Washer) Included         1       1 Foot (100 Barries Coax)       SMA Male       Description Coax Inches       Part NO.         3       0 Gut Saud 4.9 G dut       1 Foot       SMA Male       Description Coax Inches       Part NO.       Death 1117-5X-BCCBB1



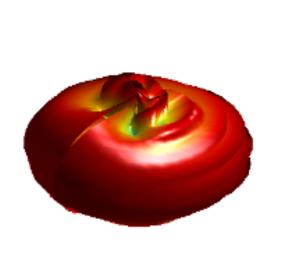
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## Part Number: 08-ANT-1117-SF-BCCBB1

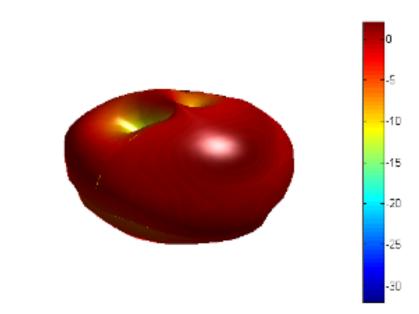
model number: 08-ANT-1117-SF product description: 1X GPS, 2X WiFi (Dual Band, WiFi 6), 2X Cellular

Frequency: 2.48 GHz WiFi 1



-5 -10 -15 -20 -25 -30 -35 -40

Frequency: 2.48 GHz WiFi 2



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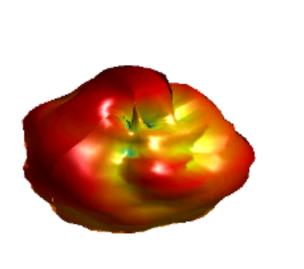
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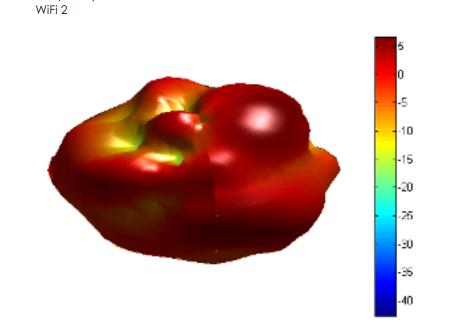
## Part Number: 08-ANT-1117-5X-BCCBB1

model number: 08-ANT-1117 product description: 1X GPS, 2X WiFi (Dual Band, WiFi 6), 2X Cellular

Frequency: 5.2 GHz WiFi 1



5 -0 -5 -10 -15 -20 -25 -30



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Frequency: 5.2 GHz



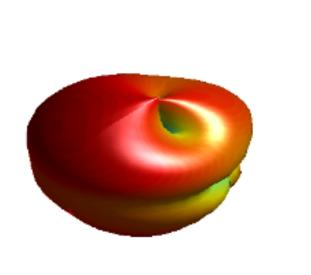
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## Part Number: 08-ANT-1117-5X-BCCBB1

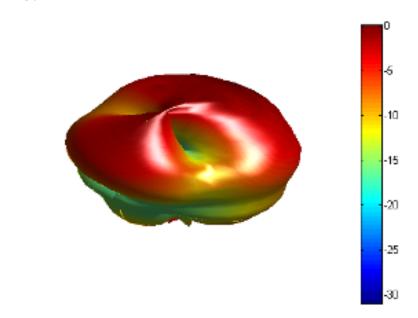
model number: 08-ANT-1117 product description: 1X GPS, 2X WiFi (Dual Band, WiFi 6), 2X Cellular

Frequency: 654 MHz Cell 1



-5 -10 -15 -20-25 -30 -35 -40

Frequency: 654 MHz Cell 2



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Frequency: 762 MHz

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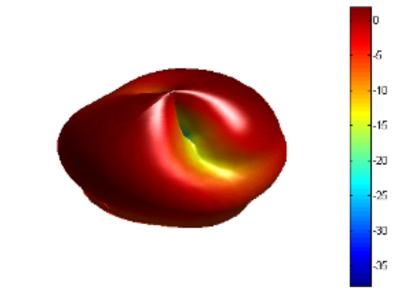
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## Part Number: 08-ANT-1117-5X-BCCBB1

model number: 08-ANT-1117 product description: 1X GPS, 2X WiFi (Dual Band, WiFi 6), 2X Cellular

Cell 1 Cell 2





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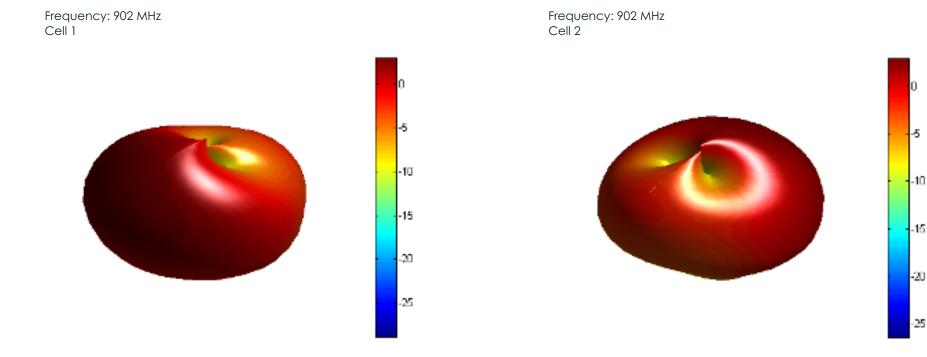
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## Part Number: 08-ANT-1117-5X-BCCBB1

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## Part Number: 08-ANT-1117-5X-BCCBB1

model number: 08-ANT-1117 product description: 1X GPS, 2X WiFi (Dual Band, WiFi 6), 2X Cellular

Frequency: 2 GHz Cell 2 Frequency: 2 GHz Cell 2 Cell 2

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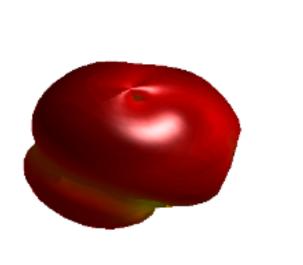
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model number: 08-ANT-1117 product description: 1X GPS, 2X WiFi (Dual Band, WiFi 6), 2X Cellular

Frequency: 2.5 GHz Cell 1



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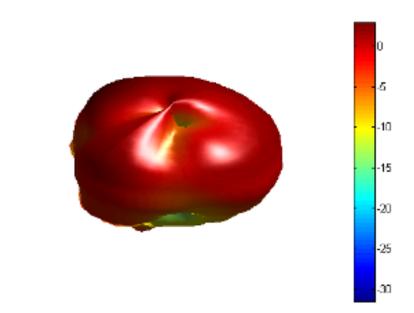
-15

-20-25

-30 -35

-40

45 -60 Frequency: 2.5 GHz Cell 2



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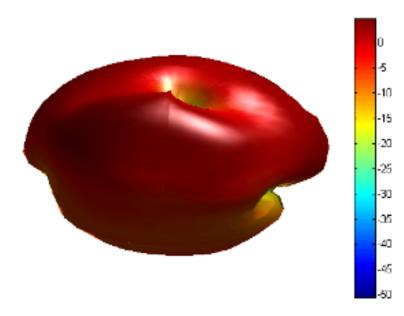
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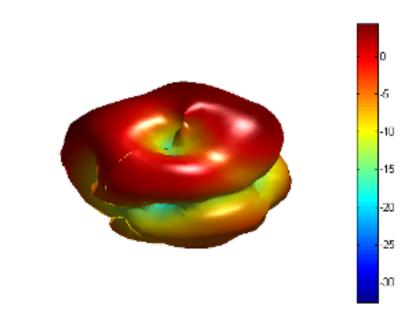
## Part Number: 08-ANT-1117-5X-BCCBB1

model number: 08-ANT-1117 product description: 1X GPS, 2X WiFi (Dual Band, WiFi 6), 2X Cellular

Frequency: 3.6 GHz Cell 1



Frequency: 3.6 GHz Cell 2



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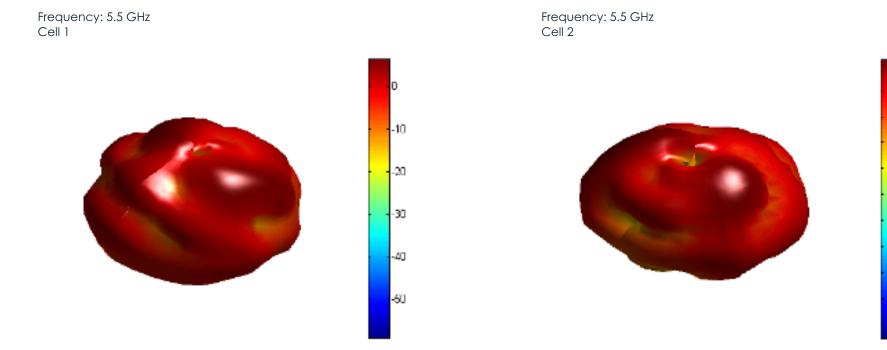
25 30

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-40 -45

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