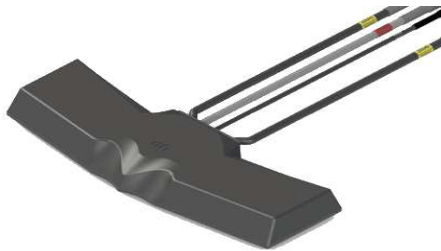


# Dash Mount GPS/GNSS, WiFi + MiMo 4G/3G/2G Antenna

PANORAMA ANTENNAS

BATGM[F][2]-7-27-24-58

## Dash Mount 4G/3G/2G Antenna with optional GPS/GNSS & (MiMo) WiFi



- Mount on or under dashboard
- MiMo 4G/3G/2G functionality
- WiFi 2.4/5.0GHz (MiMo Option)
- GPS/GNSS 26dB LNA

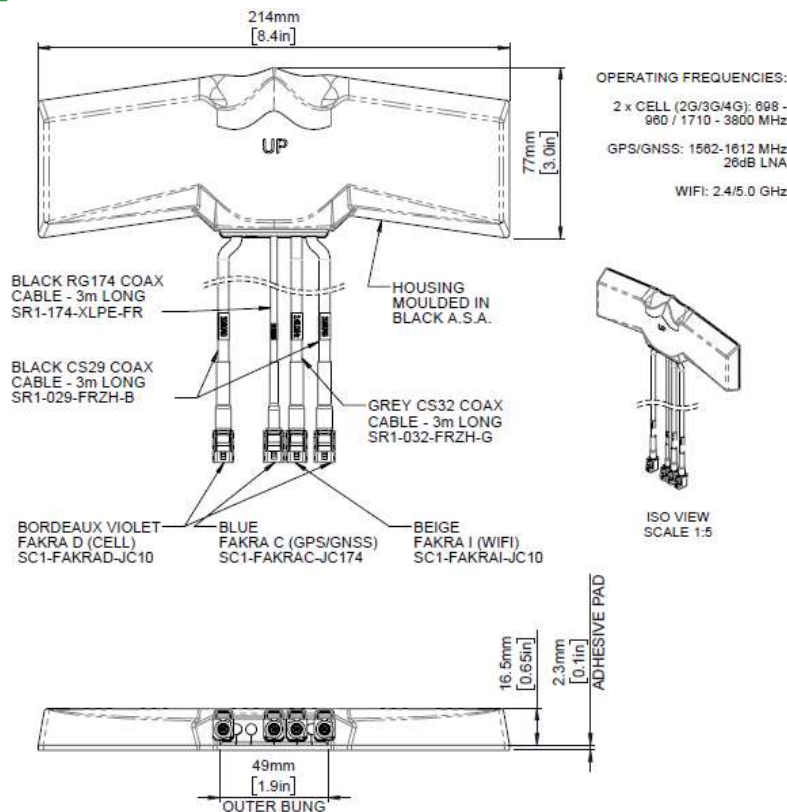
The Panorama BATGM range is designed for Telematics applications requiring high speed data with MiMo 4G and fallback 3G/2G support along with optional positioning through GPS/GNSS, and optional dual band 2.4/5.0GHz Wifi.

The isolated dual 4G/3G/2G antennas cover 698-960/1710-3800MHz and the efficient element design ensures a high first time connection rate and an ongoing, robust communications link even in many low coverage areas.

The antenna is designed to be mounted on or under a vehicle dashboard but can be mounted on any non-conductive surface. The BAT range is supplied with up to five integrated low loss cables which are flame retardant and meet the requirements of UN118.01.

### Technical Drawing

BATGMF-7-27-24-58 shown



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# Dash Mount GPS/GNSS, WiFi + MiMo 4G/3G/2G Antenna

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BATGM[F][2]-7-27-24-58

## Product Data

Part No.		BATGM2-7-27-24-58	BATGMF2-7-27-24-58	BATGM-7-27-24-58	BATGMF-7-27-24-58
<b>Electrical Data</b>					
Frequency Range (MHz)	Elements 1&2	698-960/1710-3800			
	Element 3	1562-1612MHz			
	Element 4	2.4/5.0GHz			
	Element 5	2.4/5.0GHz	-		
	Elements 1&2	2dBi (698-960MHz) / 3dBi (1710-2170MHz) / 5dBi (2500-3800MHz)			
Peak Gain†	Element 4	4dBi (2.4GHz) / 5dBi (5.0GHz)			
	Element 5	4dBi (2.4GHz) / 5dBi (5.0GHz)	-		
	Elements 1&2	<2.5:1			
Typical VSWR*	Element 4	<2.5:1			
	Element 5	<2.5:1	-		
	Elements 1&2	>10dB			
Typical Isolation *	Elements 1&2	>10dB			
Pattern	Omni-directional				
Impedance	50Ω				
Max input power (W)	20				
<b>GPS/GNSS Data</b>					
Frequency Range (MHz)	1562-1612MHz				
LNA Peak Gain	26dB				
Typical Voltage	3-5VDC <20ma				
Type Approval	E11				
<b>Mechanical Data</b>					
Dimensions (mm)	Length	214 (8.4")			
	Width	77 (3")			
	Height	16.5 (0.65")			
Operating Temp (°C)	-30° / +70°C (-30° / 158°F)				
Material	ASA				
Colour	Black				
<b>Mounting Data</b>					
Fixing	Adhesive pad				
<b>Cable Data</b>		<b>Elements 1&amp;2 (Cell)</b>	<b>Element 3 (GPS/GNSS)</b>	<b>Element 4 (WiFi)</b>	<b>Element 5 (WiFi)</b>
Cable Type	FR CS29 (meets UN118.01)		FR RG174 (meets UN118.01)	CS32 (meets UN118.01)	CS32 (meets UN118.01)
Diameter (mm)	5 (0.2")		2.8 (0.11")	5 (0.2")	5 (0.2")
Length (m)	3 (10')		3 (10')	3 (10')	3 (10')
<b>Termination</b>					
BATGMF2-7-27-24-58	2x FAKRA D Jack (Burgundy)		FAKRA C Jack (Blue)	FAKRA I Jack (Beige)	FAKRA I Jack (Beige)
BATGMF-7-27-24-58	2x FAKRA D Jack (Burgundy)		FAKRA C Jack (Blue)	FAKRA I Jack (Beige)	-
BATGM2-7-27-24-58	2x SMA Plug (m)		SMA Plug (m)	Rev Pol SMA Plug (f)	Rev Pol SMA Plug (f)
BATGM-7-27-24-58	2x SMA Plug (m)		SMA Plug (m)	Rev Pol SMA Plug (f)	-

† Peak gain does not include cable attenuation \*VSWR & Isolation measured on 3mm thick ASA with 3m (10') of CS29 cable

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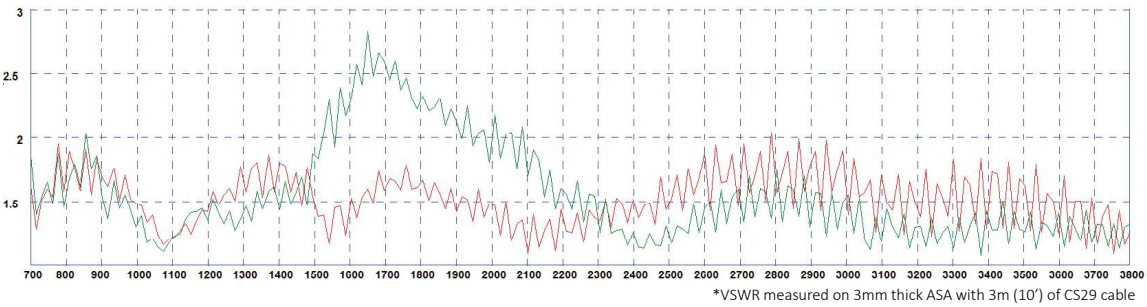
# Dash Mount GPS/GNSS, WiFi + MiMo 4G/3G/2G Antenna



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## Electrical Data - Cell

Typical VSWR Elements 1&2\*

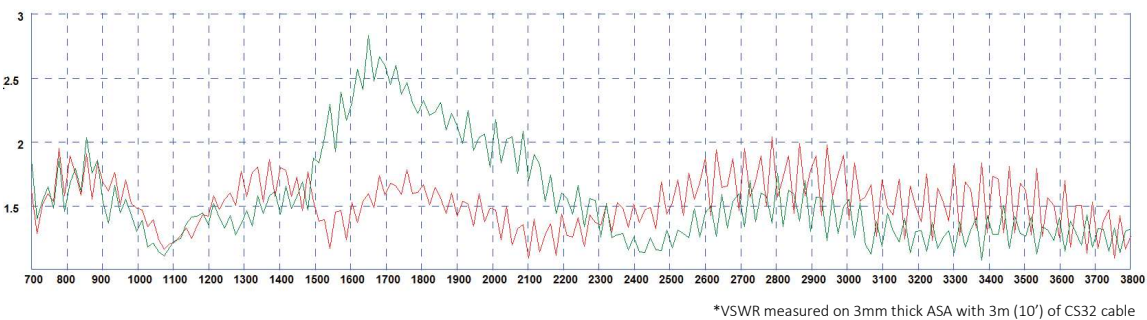


Typical Isolation Elements 1&2\*



## Electrical Data- WiFi

Typical VSWR Elements 4&5\*



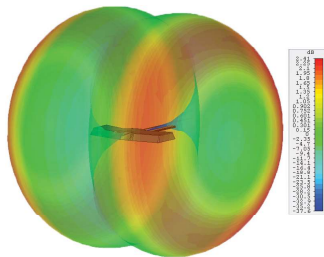
# Dash Mount GPS/GNSS, WiFi + MiMo 4G/3G/2G Antenna

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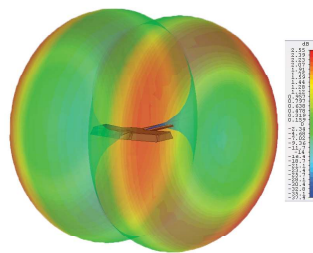
BATGM[F][2]-7-27-24-58

## 3G Patterns - Cell

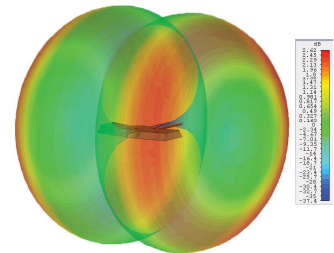
Typical 3D Pattern - 700MHz Elements 1&2 fed



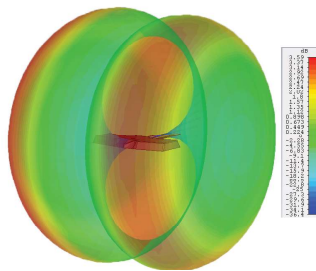
Typical 3D Pattern - 800MHz Elements 1&2 fed



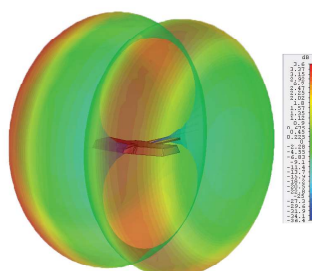
Typical 3D Pattern - 900MHz Elements 1&2 fed



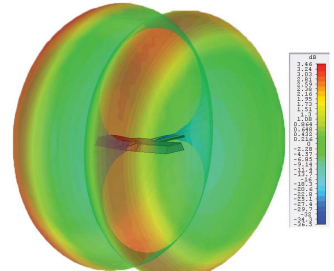
Typical 3D Pattern - 1800MHz Elements 1&2 fed



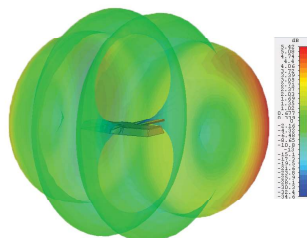
Typical 3D Pattern -1900MHz Elements 1&2 fed



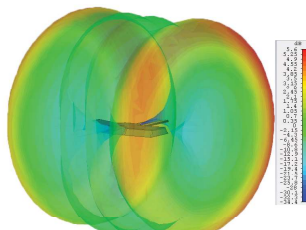
Typical 3D Pattern - 2100MHz Elements 1&2 fed



Typical 3D Pattern - 2600MHz Elements 1&2 fed

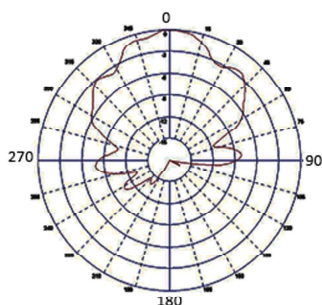


Typical 3D Pattern -3600MHz Elements 1&2 fed

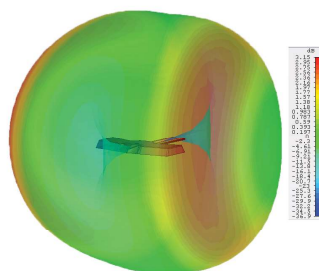


## Pattern -GNSS

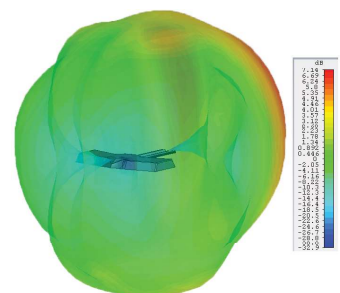
Typical E Plane GPS/GNSS - 1575MHz Element 3



Typical 3D Pattern - 2.4GHz Elements 4&5 fed



Typical 3D Pattern - 5.4GHz Elements 4&5 fed



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