

The '**Mallard**' is a low-profile, multifunction antenna designed for blue-light and amber-light vehicle fleets, combining up to 9 functions within a single panel-mounted unit. With optional fitting kits, the 'Mallard' can be installed using the existing OEM mounting hole, preventing the need to drill additional holes and maintaining OEM functions.

This variant supports **5 Functions** including **2x LTE**, **2x WiFi** and **1x GPS**

Supplied Coax Extension Cables

Also Available in White: Part No. 7000-215



Coax Cables	2x LTE	2x Wi-Fi	1x GPS
Cable Type	SBC240	SBC240	SBC100
length	5m or 3m	5m or 3m	5m or 3m
Diameter (mm)	6.1	6.1	2.8
Min. Bend Radius (mm)	30	30	14
Operating Temp. °C	-40-80	-40-80	-40-80
Termination	SMA (m)	SMA Reverse Polarity (m)	SMA (m)
Labeling	LTE M & LTE A	Wi-Fi M & Wi-Fi A	GPS

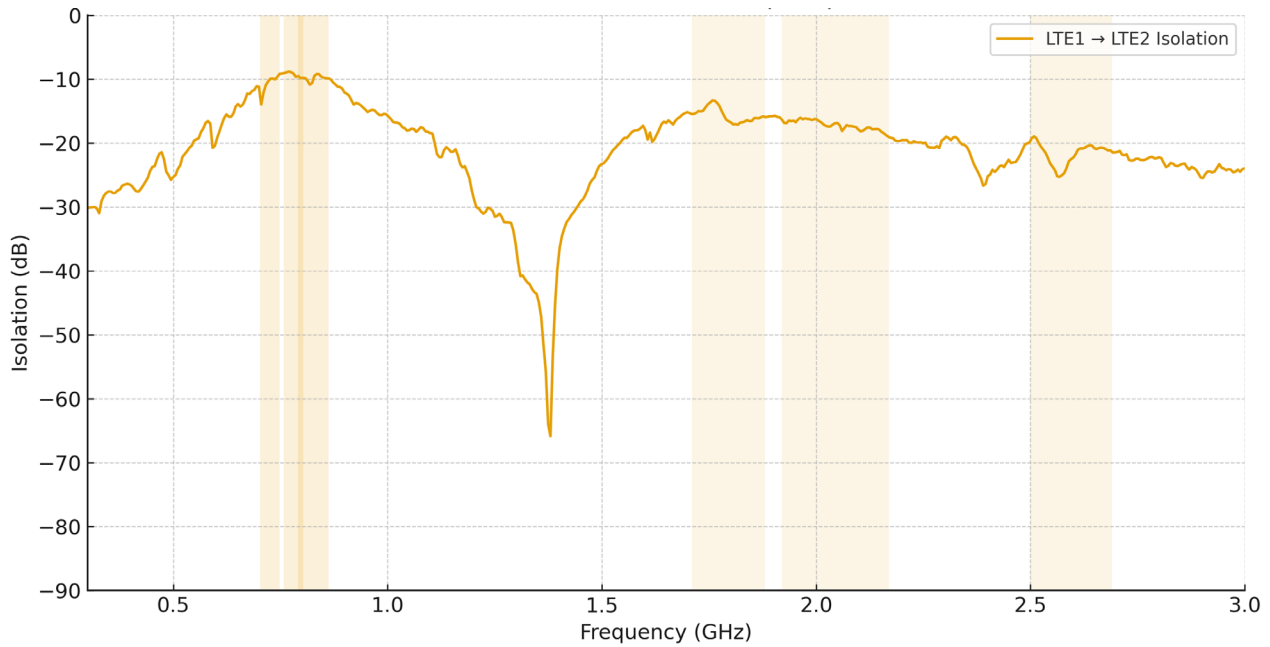
Technical Specifications

Part No.	7000-315	
Electrical Data	2G 3G 4G 5G	Wi-Fi
Frequency Range (MHz)	698-6000 MHz	2.4 GHz & 5.8GHz
Band	2x2 MiMo 2G 3G 4G 5G	2x2 MiMo Dual Band Wi-Fi
VSWR	<2.1:1 TYPICALLY 1.5:1	<2.1:1 TYPICALLY 1.5:1
Gain	Minimum 4dBi	Minimum 4dBi
Isolation	<-25dB	<-25dB
Polarisation	Vertical	Vertical
Pattern	Omni-directional	Omni-directional
Impedance	50Ω	50Ω
Max Power Input (W)	10W	10W
GPS/GLONASS		
Frequency Range (MHz)	1562-1612	
VSWR	<2:1	
Gain	26dB	
Polarisation	Right Hand Circular	
Operating Voltage	3-5v DC (fed via coax)	
Cable	2x 230mm RG316 Terminated to SMA (m)	
Mechanical Data		
Dimensions (mm)	H80xW70xL230	
Operating Temp (°C)	-40 / +80°C (-40° / 176°F)	
Material	ABS/PC	
Colour	Black	
Weight (g)	310	
Ingress Protection	IP66	
Cable Data		
Cable Type	RG316	RG316
length	160mm	200mm
Diameter	2.8	2.8
Termination	SMA (f)	SMA (m) Reverse Polarity
Mounting Data		
Mounting Type	Panel mount	
Mounting Hole (mm)	15mm	
Max Panel Thickness (mm)	10mm	

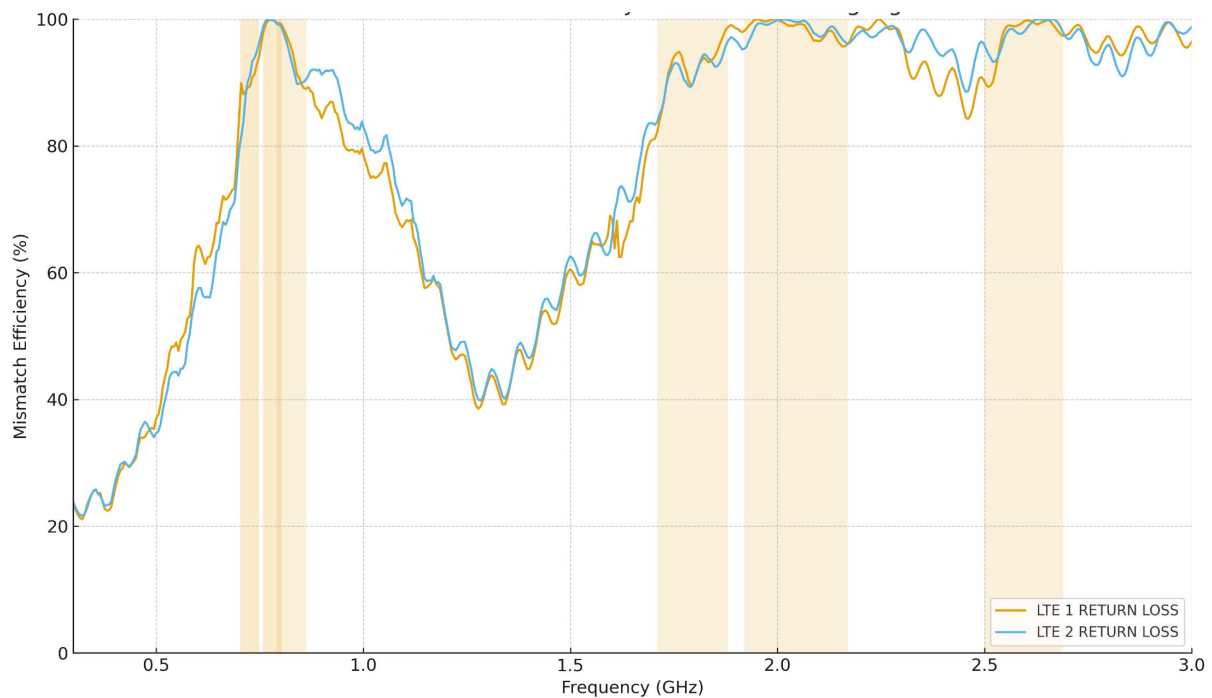
Subject to change without prior notice.



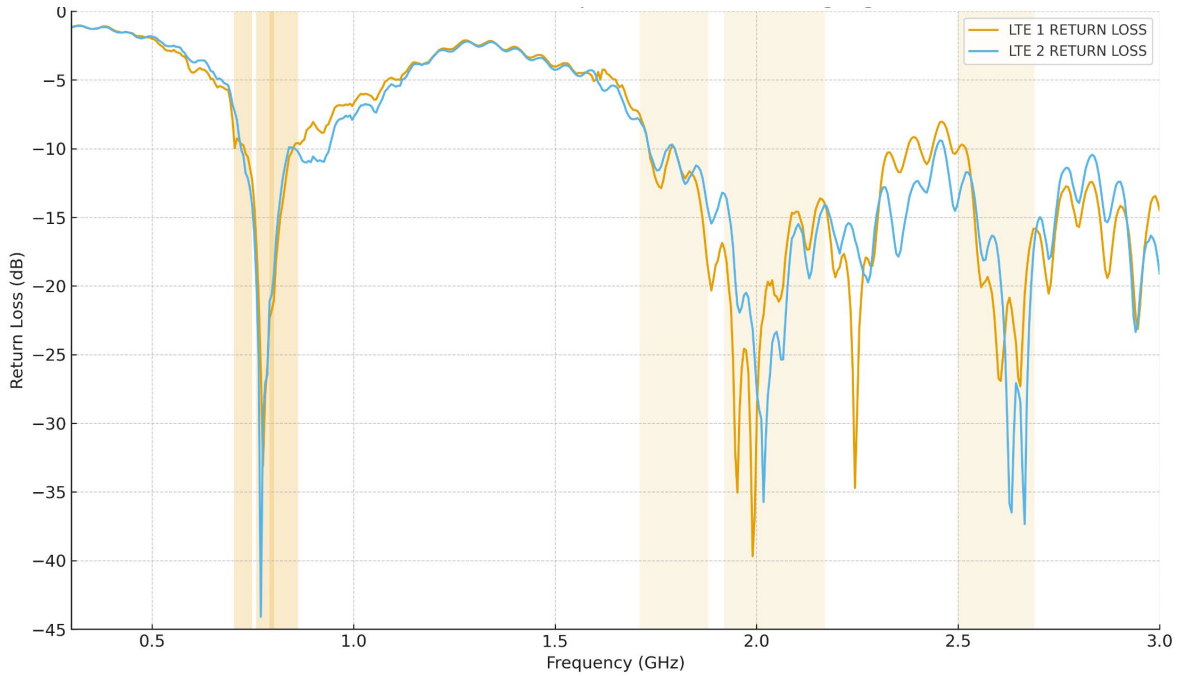
LTE Isolation



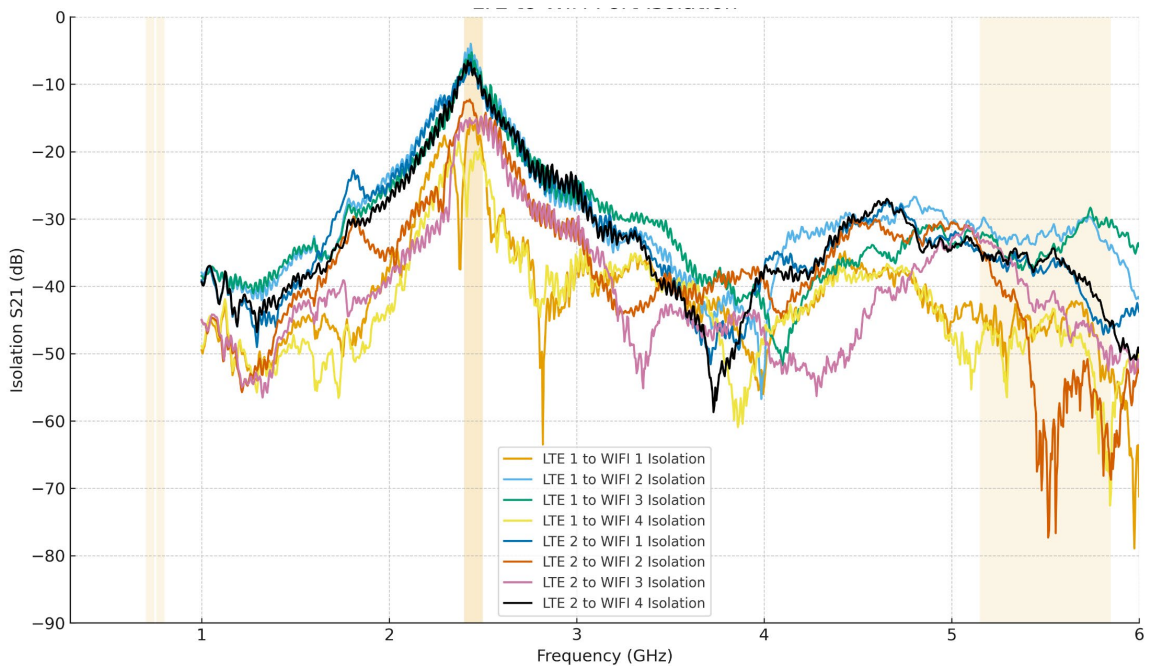
LTE Port Mismatch Efficiency



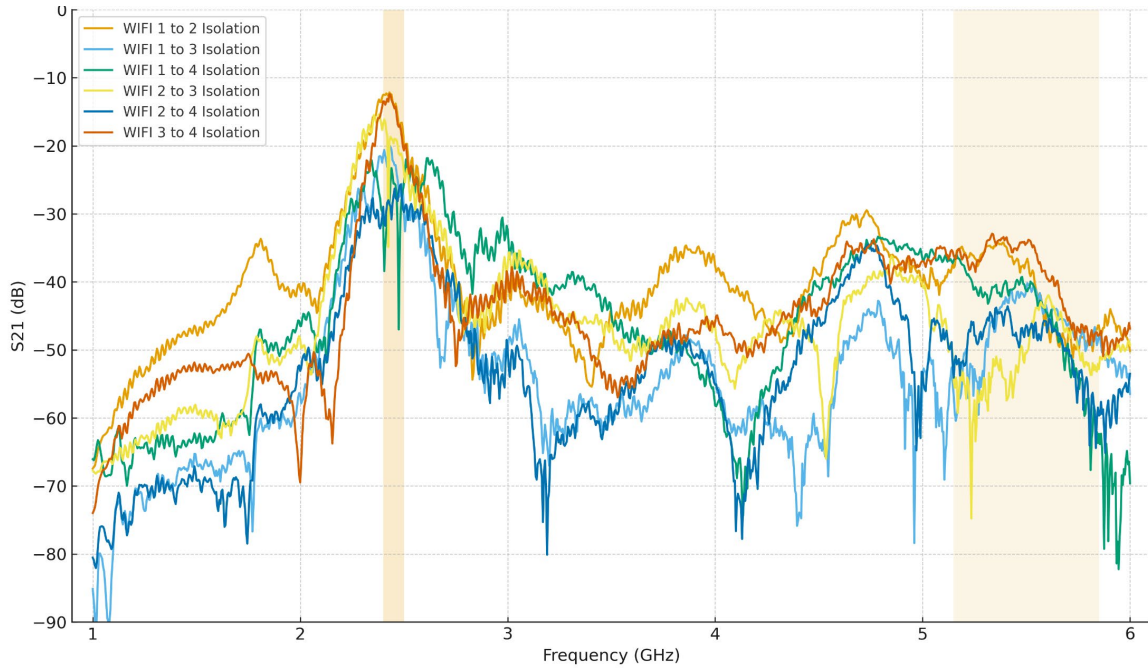
LTE Return Loss



LTE to Wi-Fi Port Isolation



Wi-Fi Port Isolation



Wi-Fi Port Mismatch Efficiency

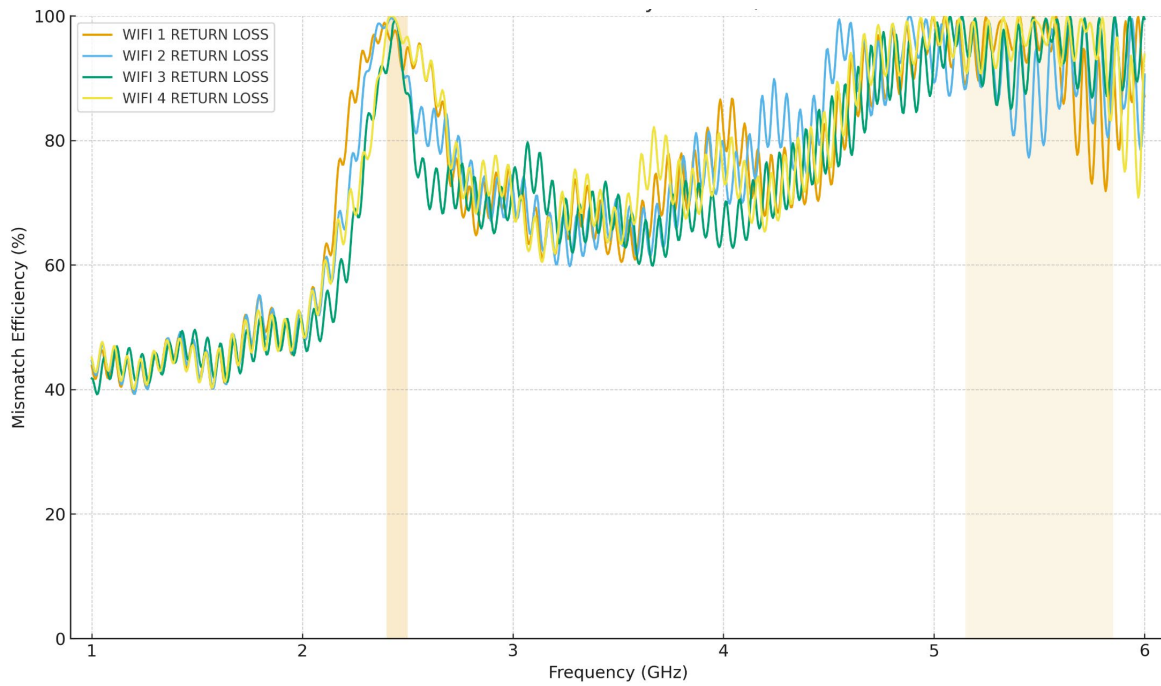
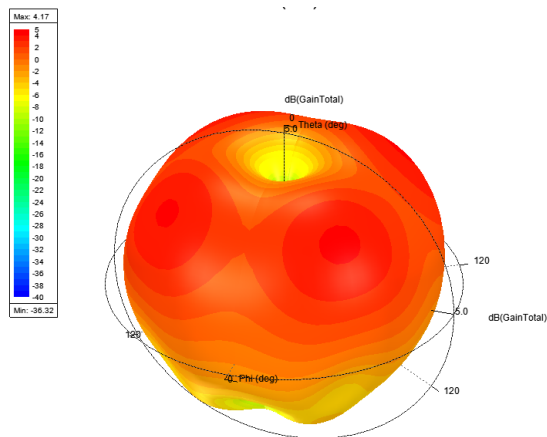


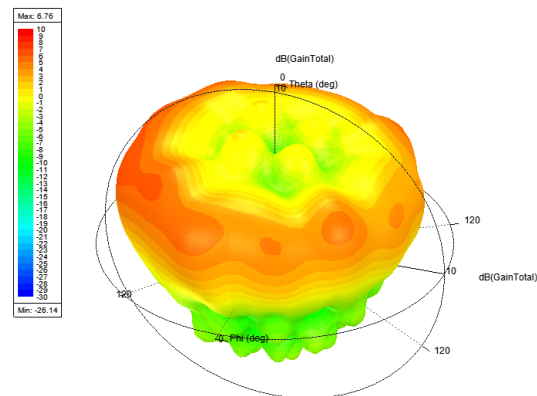
Figure 10 is a line graph showing the Return Loss (dB) versus Frequency (GHz) for four different WiFi channels (WIFI 1, 2, 3, 4). The y-axis represents Return Loss (dB) ranging from 0 to -45 dB, and the x-axis represents Frequency (GHz) ranging from 1 to 6 GHz. The graph displays four data series: WIFI 1 RETURN LOSS (orange line), WIFI 2 RETURN LOSS (blue line), WIFI 3 RETURN LOSS (green line), and WIFI 4 RETURN LOSS (yellow line). All four channels show a sharp drop in return loss (increasing in dB magnitude) around 2.4 GHz and 5.2 GHz, which are highlighted by vertical shaded regions. The return loss generally increases (becomes less negative) as frequency increases beyond 3 GHz.

Antenna 3D Gain Plots

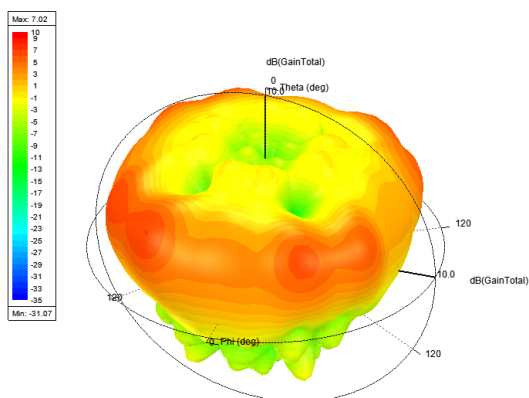
820MHz



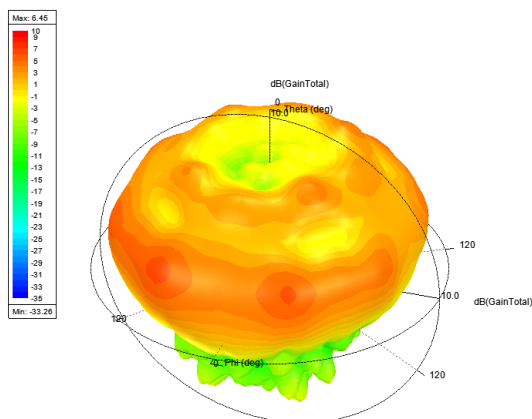
1820MHz



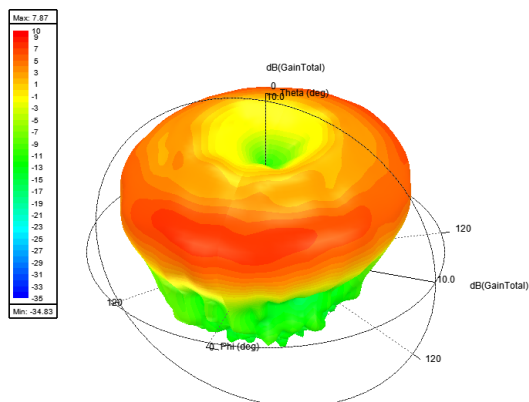
2140MHz



2600MHz



3600MHz



All graphs & diagrams subject to change without prior notice.

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