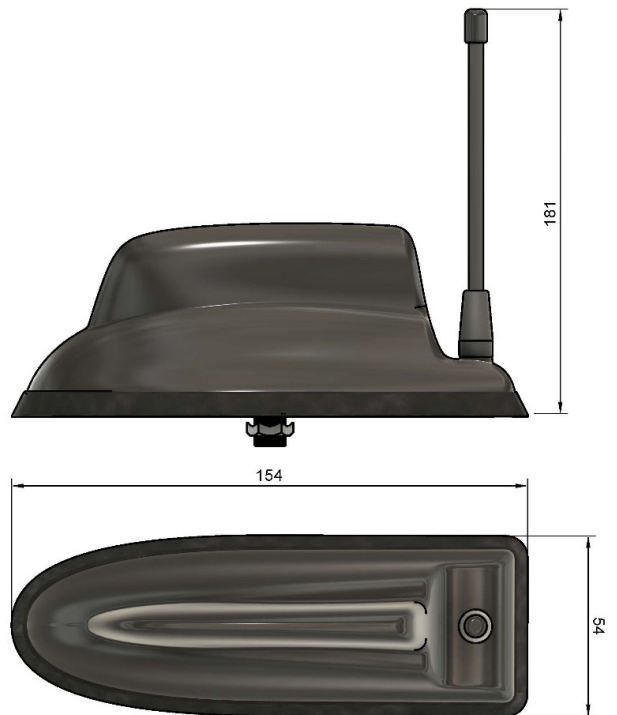


7000-307 'Mallard' 7-in-1 Antenna Black incl. TETRA

5 YEAR WARRANTY



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 **7 Functions** including **TETRA, 2x LTE, 2x WiFi, and 2x GPS**

Also Available in White: Part No. 7000-207



Part No.	Cable Kit Options
SK021996	Product Kit : Sure Antennas Gloss Black Mallard 7 in 1 Antenna & 5m Router/ESN & Airwave Cable Kit
SK021990	Product Kit : Sure Antennas Gloss Black Mallard 7 IN 1 Antenna 7 x 4m Motorola & Sepura
SK021984	Product Kit : Sure Antennas Black Mallard 7 in 1 MiMo Antenna & 3m Router/ESN & Airwave Cable Kit

7000-307 'Mallard' 7-in-1 Antenna Black incl. TETRA

Technical Specifications

Part No.		7000-307		
Electrical Data		TETRA	2G 3G 4G 5G	Wi-Fi
Frequency Range (MHz)	380 - 430 MHz	698-6000 MHz	2.4 GHz & 5.8GHz	
Band	TETRA	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	<2.1:1 TYPICALLY 1.5:1	
Gain	5dBi	Minimum 4dBi	Minimum 4dBi	
Isolation	-	<-25dB	<-25dB	
Polarisation	Vertical	Vertical	Vertical	
Pattern	Omni-directional	Omni-directional	Omni-directional	
Impedance	50Ω	50Ω	50Ω	
Max Power Input (W)	25W	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	RG316	
length	280mm	160mm	200mm	
Diameter	2.8	2.8	2.8	
Termination	TNC (f)	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. *Excluding external antenna

Coax Cables Cable Type length Diameter (mm) Min. Bend Radius (mm) Operating Temp. °C Termination Labeling	2x LTE		2x Wi-Fi		1x GPS	1x TETRA	1x GPS
	SBC240		SBC240		SBC100	SBC195	SBC100
	5m or 3m		5m or 3m		5m or 3m	5m or 3m	5m or 3m
	6.1		6.1		2.8	4.95	2.8
	30		30		14	25	14
	-40-80		-40-80		-40-80	-40-80	-40-80
	SMA (m)		SMA Reverse Polarity (m)		SMA (m)	BNC (m)	SMA (m) – Motorola and Sepura adaptors supplied.
	LTE M & LTE A		Wi-Fi M & Wi-Fi A		GPS	TETRA	GPS TETRA

Diagram illustrating the wiring connections for a vehicle antenna system. The antenna unit is connected to various cables, including GPS and LTE lines. The connections are detailed in the table below.

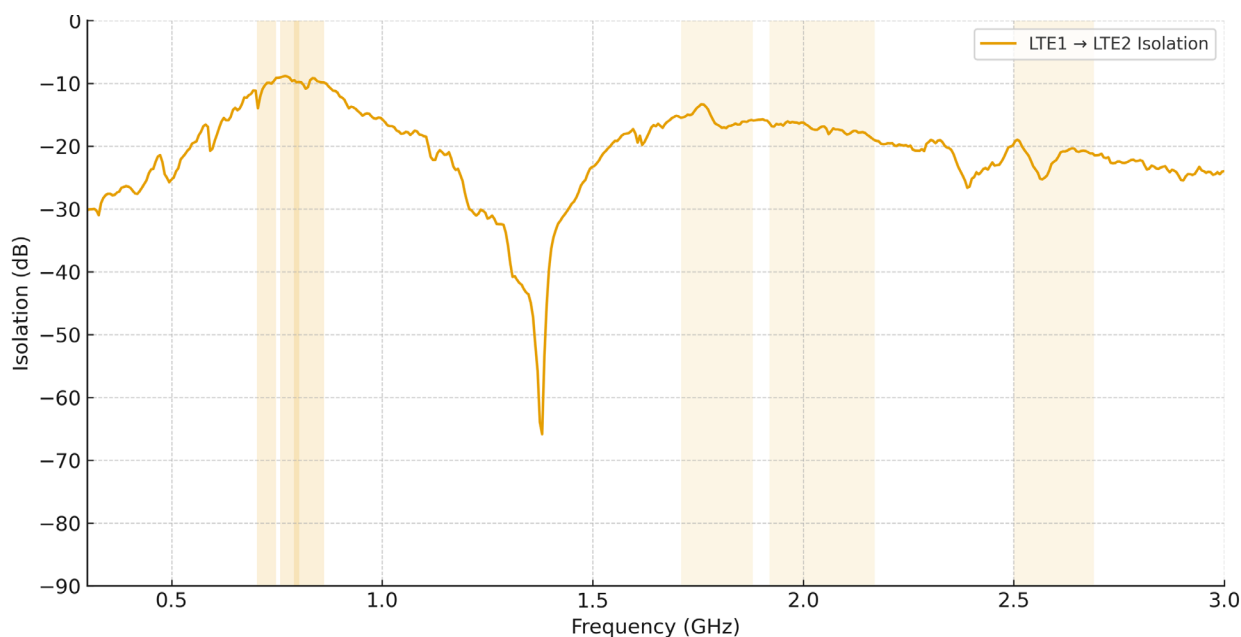
Legend:

- SMC GPS Adaptor
- FME GPS Adaptor

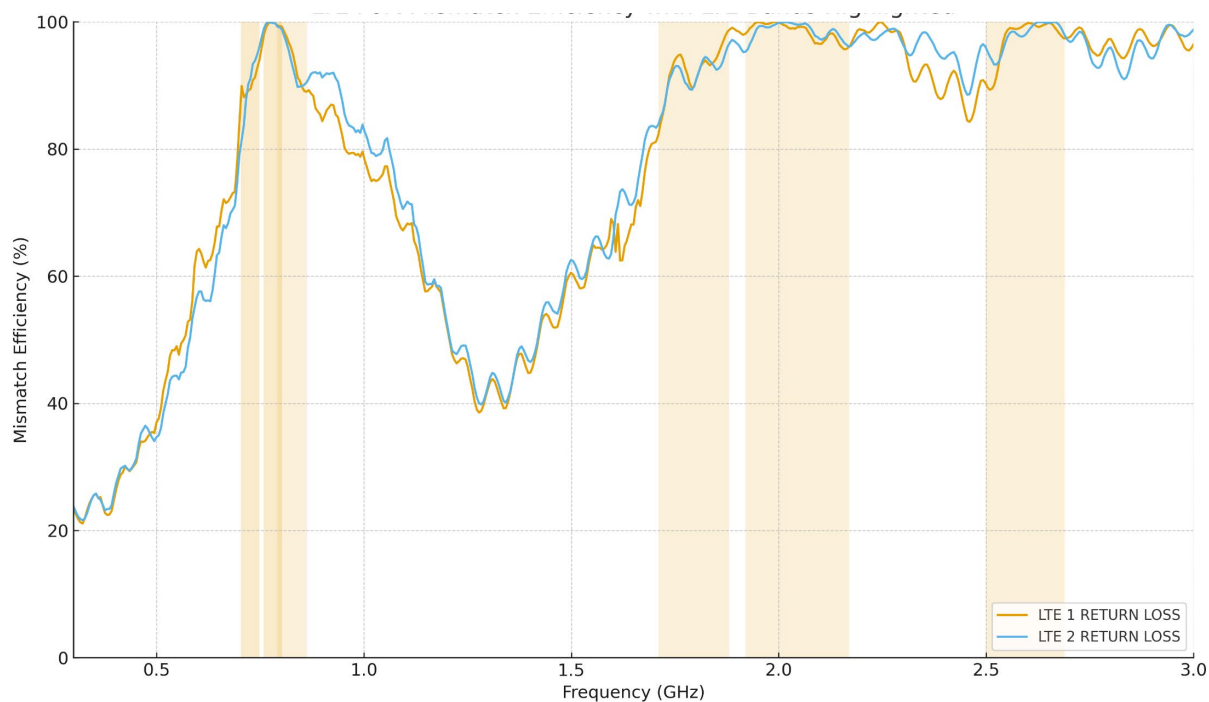
5m Extension Cables

Antenna Unit Connector	Intermediate Connector	Extension Cable Part Number	Vehicle Connector
GPS 1	GPS 1	SCTS07S1-05000-LBC100	GPS 1
EXT	EXT	SCTT1TB1-05000-LBC195	TETRA
LTE 1	LTE 1	SCTS1TS1-05000-LBC240	LTE MAIN
LTE 2	LTE 2	SCTS1TS1-05000-LBC240	LTE DIV
GPS 2	GPS 2	SCTS07S1-05000-LBC100	GNSS
WWF 1	WWF 1	SCT05T1S-05000-LBC240	WWF Main 1
WWF 2	WWF 2	SCT05T1S-05000-LBC240	WWF Div 1

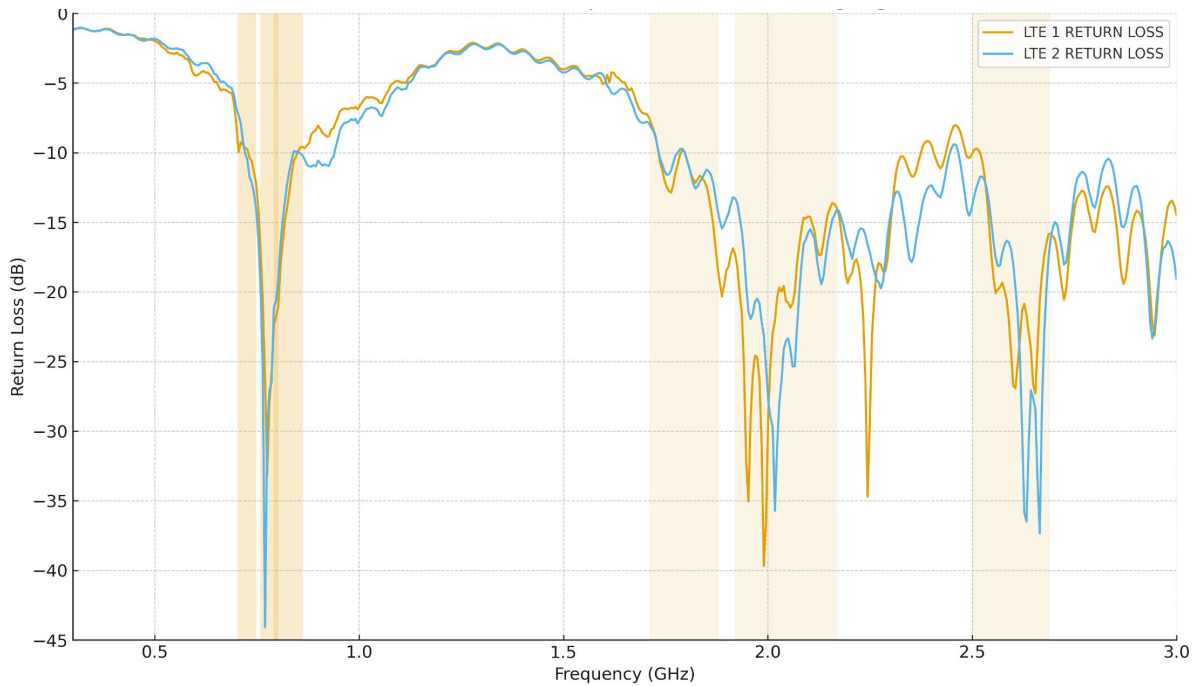
LTE Isolation



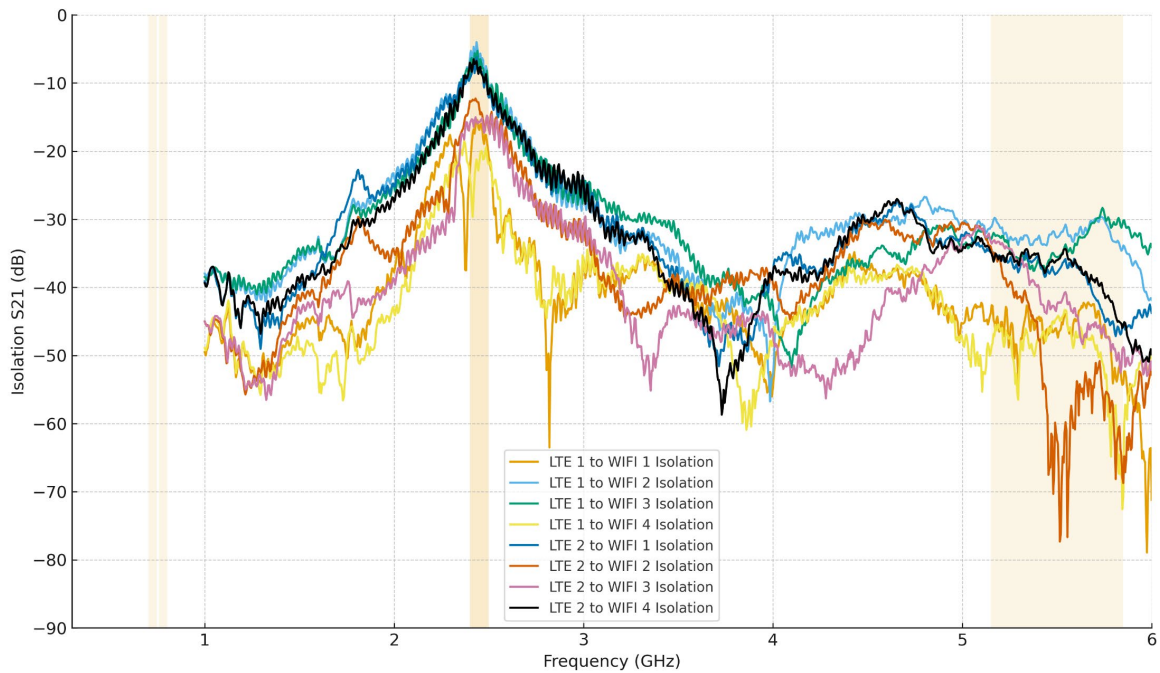
LTE Port Mismatch Efficiency



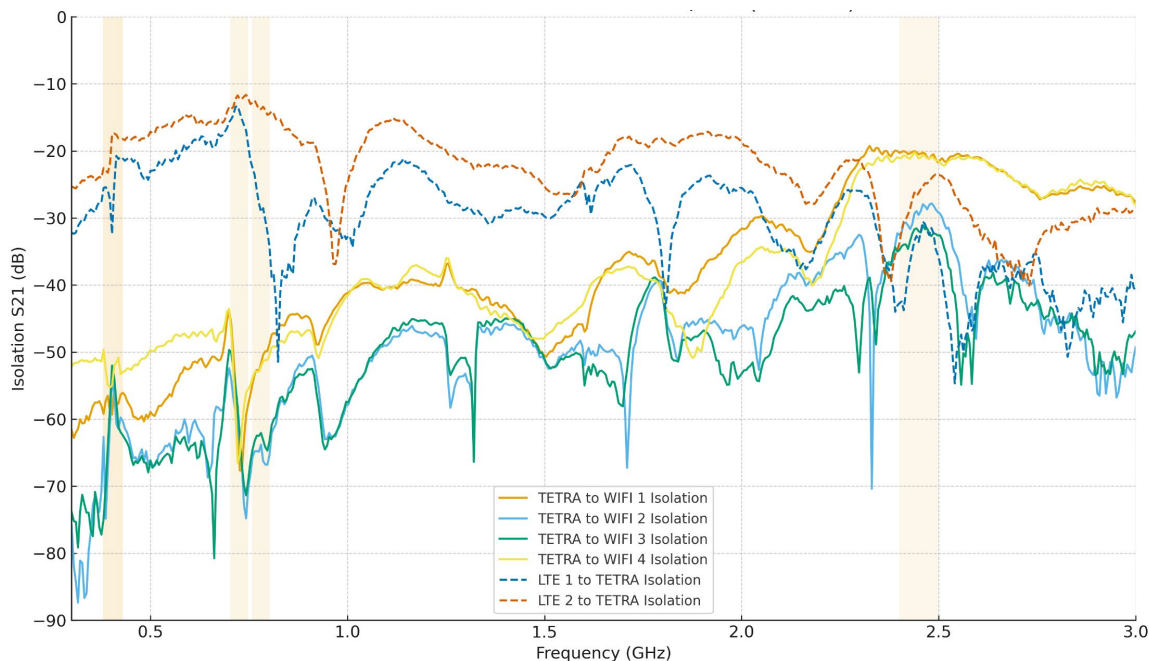
LTE Return Loss



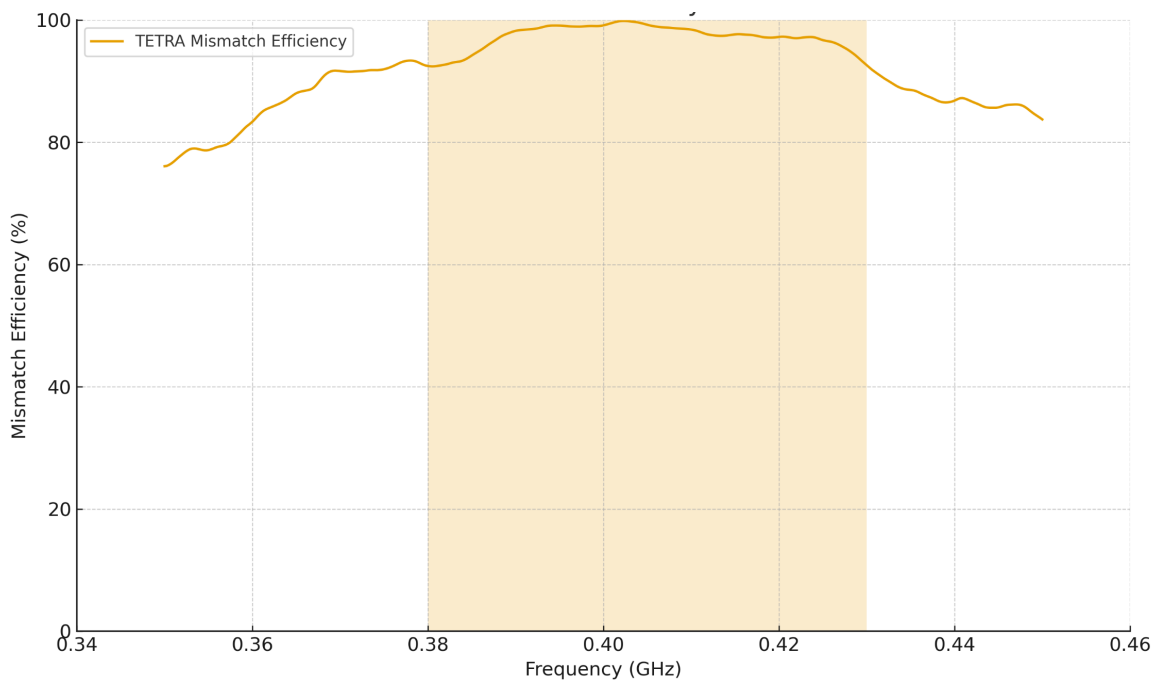
LTE to Wi-Fi Port Isolation



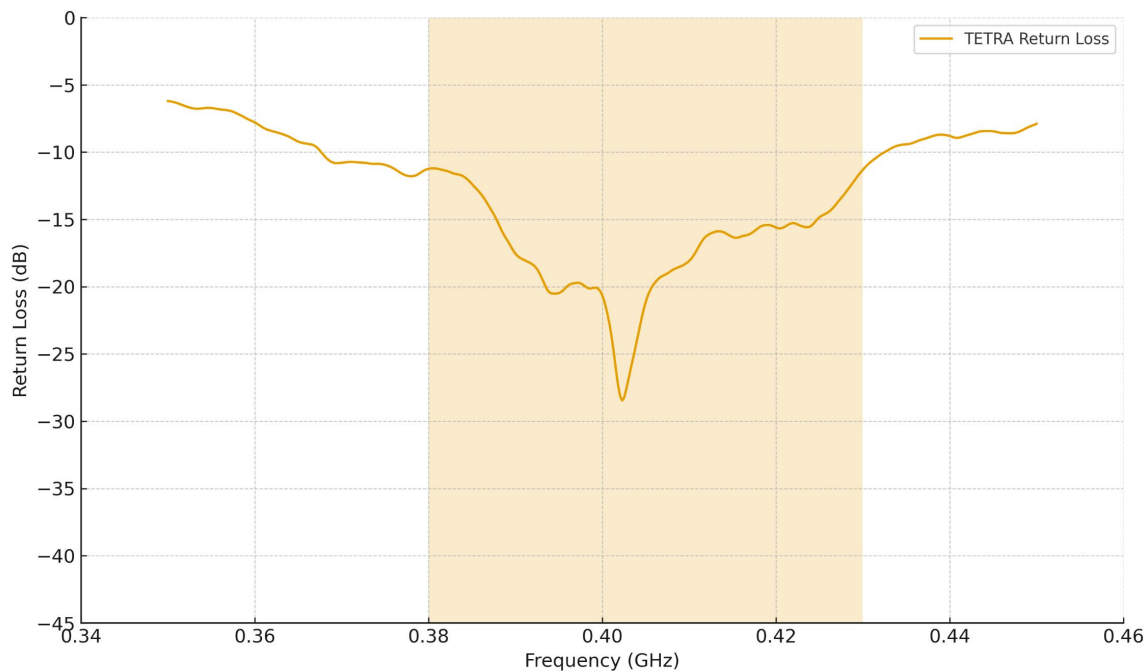
TETRA to LTE/Wi-Fi Isolation



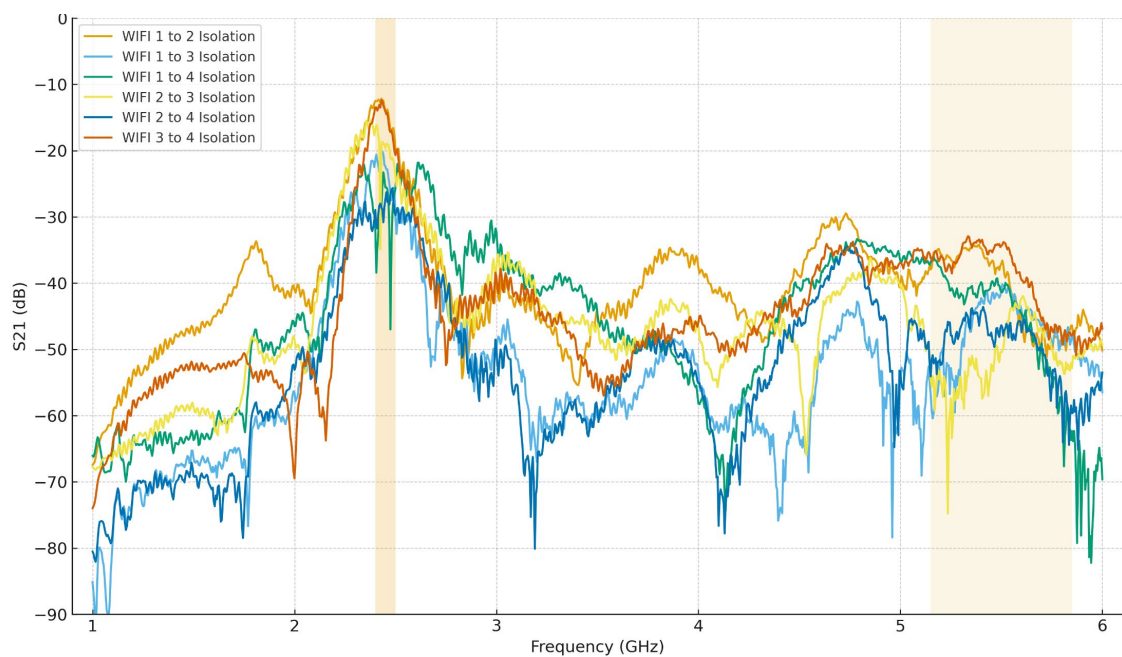
TETRA Port Mismatch Efficiency



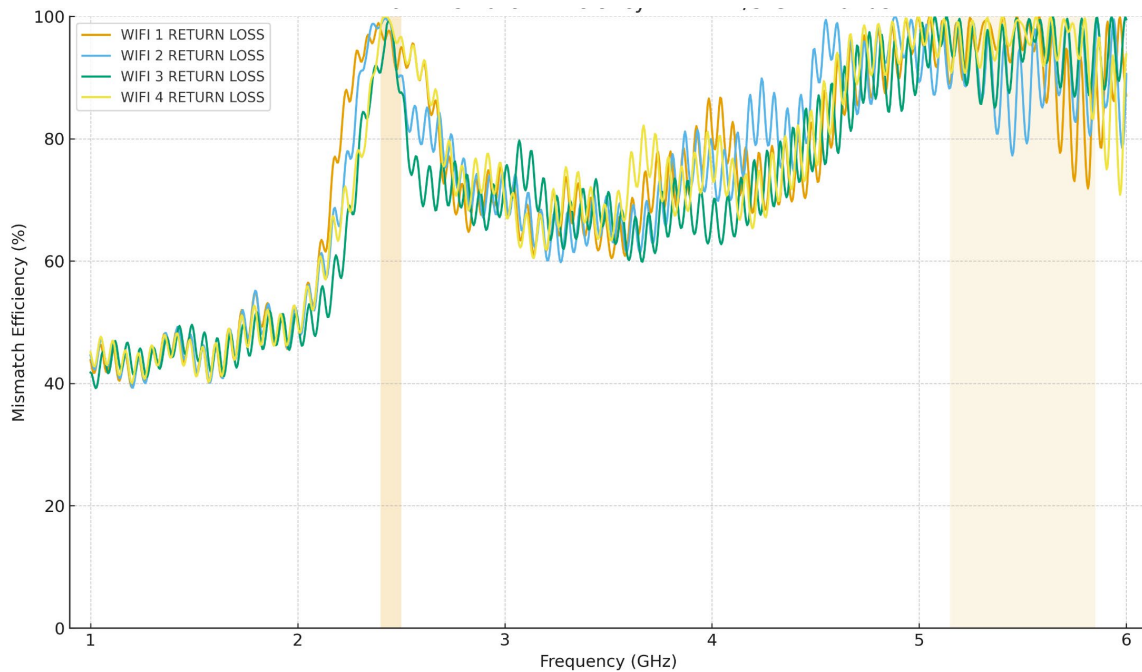
TETRA Port Return Loss



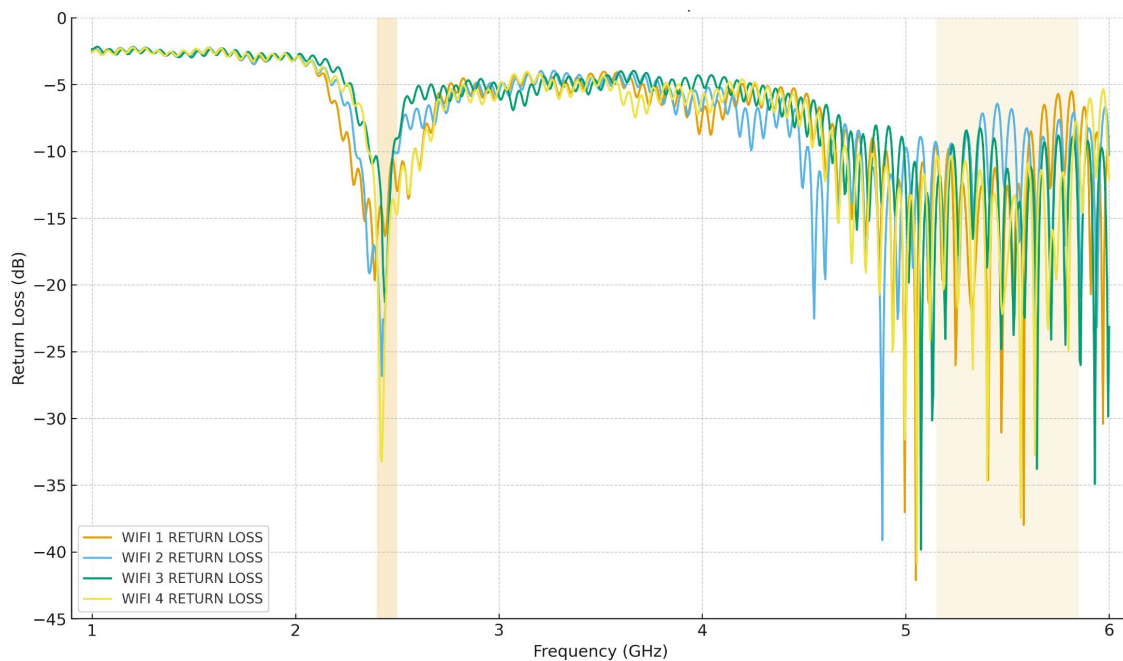
Wi-Fi Port Isolation



Wi-Fi Port Mismatch Efficiency



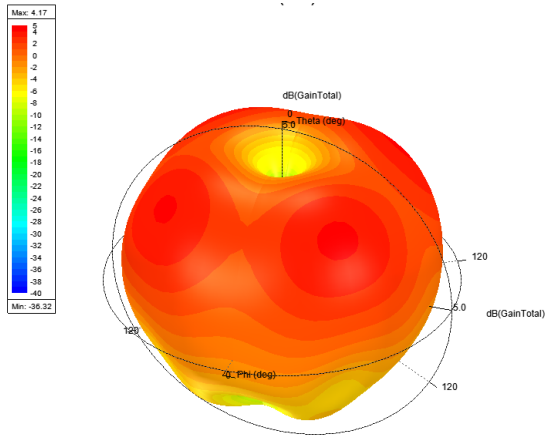
Wi-Fi Port Return Loss



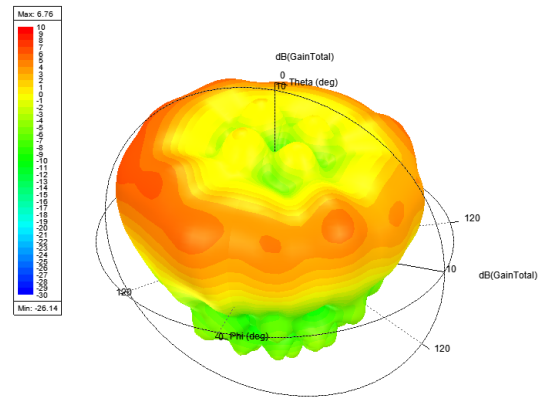
7000-307 'Mallard' 7-in-1 Antenna Black incl. TETRA

Antenna 3D Gain Plots

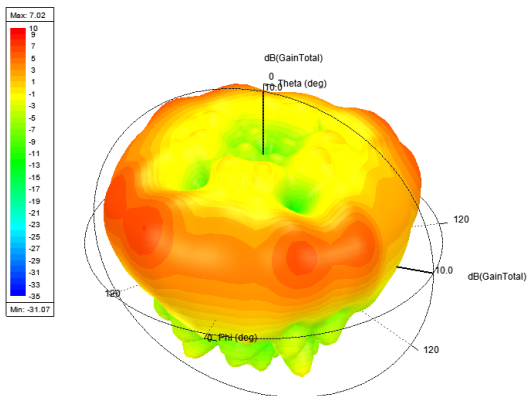
820MHz



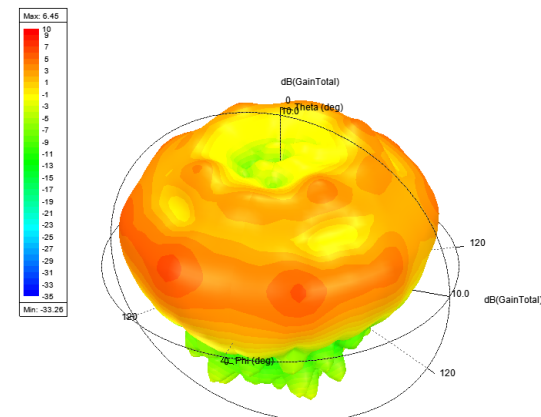
1820MHz



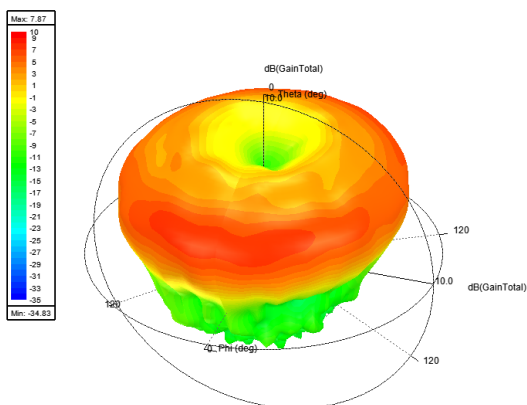
2140MHz



2600MHz



3600MHz



All graphs & diagrams are subject to change without prior notice.

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