



# VEHICULAR 4-PORT MIMO ANTENNA

## 698-960 / 1710-2700 / 2300-2700 / 4900-5900 MHZ + GPS MIMO ANTENNA

The Laird vehicular 4-port MIMO antenna covers the 698-960 / 1710-2700 MHz, 2300-2700 / 4900-5900 MHz as well as GPS (1575.42 MHz) frequency ranges. Configured with 3-port, dual-band elements in addition to 1-port with integrated GPS. Connector options include SMA male connectors for 3G/4G LTE and GPS ports with an RSMA male connector for the WiFi port. The housing incorporates a low-profile, rugged design that meets IP67 standards. The antenna also features high impact, UV-resistant polycarbonate plastic available in black or white.

## **SPECIFICATIONS**

PARAMETER	PERFORMANCE				
Model Number	VLQ69273B21G-518A (Black)		VLQ69273W21G-518A (White)		
No. of Ports	4 (2-ports 3G/4G LTE, 1-port WiFi, 1-port GPS)				
	3G/4G Port		WiFi Port		
Frequency Bands (MHz)	698-960 MHz	1710-2700 MHz	2300-2700 MHz	4900-5900 MHz	
Peak Gain * dBi	3.3	4.6	5.5	5.3	
Max Gain +/- 30 above horizon	N/A	N/A	N/A	4.1	
VSWR* Typical	< 1.8:1	< 1.8:1	< 1.6:1	< 1.7:1	
VSWR * Max	< 2.0:1				
Typical Port-to-Port Isolation *					
LTE1-to-LTE2>	15 dB				
LTE1-to-WiFi>	18 DB				
LTE2-to-WiFi>	20 DB				

<sup>\*</sup>Measured on 1 ft. (30.48 cm) diameter ground plane

PARAMETER	PERFORMANCE	
Nominal Impedance	50 Ohm	
Polarization	Vertical Linear	
Azimuth Beam Width	Omnidirectional	
Input Power, Max	50 Watt (ambient temp. of 25°C / 77°F	
Operating Temperature	-30° C - +70° C (-22°F to +158°F)	
Dimensions (dia. x hgt)	132 mm x 75 mm (5.2" x 2.9")	
Weight	0.95 kg (2.09 lb)	
RF Connector	SMA-Male (3G/4G port) RSMA-Male (WiFi port)	
Cable (exposed length)	LMR195M- 518.2 cm (17 ft)	
Radome / Baseplate Material	PC, UL94 - VO Rating, UV Stable (Black & White)	
Material Compliance	ROHS compliant	
IP Dust & Water Ingress Rating	IP67	

<sup>\*</sup>Measured on 1 ft. (30.48 cm) diameter ground plane

## **GPS ANTENNA SPECIFICATIONS**

PARAMETER	PERFORMANCE				
Frequency Band	1575.42 MHz (GPS L1)				
Band Width	6 MHz (Typical)				
Amplier Gain	27 dB ± 3 dBc				
Nominal Impedance	50 Ohm				
Output VSWR	< 1.5:1				
DC Voltage	2.7 - 12 Vdc				
DC Current	20 mA (Nominal); 30 mA ( -40°C - +85°C)				
Out-of-Band Signal Rejection	> 40 dB rejection @ ± 50 MHz from center frequency				
Intermodulation@ CW Mode (-40°C - +85°C)	Int1	Int2	IM3		
Power, dBm	-10(1842.8 MHz)	-10(2110 MHz)	-100(1575.6 MHz)		
Power, dBm	-10(829.58 MHz)	-10(2405 MHz)	-100(1575.42 MHz)		
Power, dBm	-10(755.42 MHz)	-10(820 MHz)	-100(1575.42 MHz)		
Input 1 dB Compression @ 750 MHz, 2000 MHz & 3500 MHz	>10 dBm (-40°C - +85°C)				
RF Connector	SMA-Male				
Cable (exposed length)	RG174-518.2 cm (17ft)				

PART NUMBER	
VLQ69273B21NG-518A	2-Ports 4G/LTE, 1-Port GPS: SMA Male; 1 Port WiFi:RSMA Male(Black)
VLQ69273W21NG-518A	2-Ports 4G/LTE: SMA Male; 2 Ports WiFi:RSMA Male(White)

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