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FHQ69273CD

## PHANTOM FIN 4G/LTE, GPS, UHF & WLAN ROOF MOUNT ANTENNA

The Laird Phantom Fin multiband antenna provides an excellent solution for the public safety, transportation and after market fleet applications. The Phantom Fin requires only (1) one single hole mount/fixing which reduces vehicle damage, cost of installation and visual impact. The Phantom Fin design provides multiple antenna functions while remaining discrete. The Phantom Fin multiband antenna integrates 4G/LTE, GPS, UHF and WLAN frequency operation into one aerodynamic housing.

#### **FEATURES**

- One (1) single hole mount/fixing which reduces vehicle damage and cost of installation.
- Attractive, IP67 rated aerodynamic housing excellent for overt and/or discrete installations.
- Multiband 4G/LTE,GPS,UHF, and WLAN frequency operation.

#### **MARKETS**

- Public Safety
- Transportation
- · Aftermarket Fleet
- Land Mobile Radio

#### **SPECIFICATIONS**

PARAMETER	PARAMETER PERFORMANCE							
Antenna Model / No. of Ports: FHQ69273CD 4 ports								
Port ID	4G/LTE Port		WiFi Port		UHF Port			
Frequency Bands, MHz	698-960 N	IHz 1710-2700 MHz	2400-2500 MHz	4900-5875 MHz	380-430 MHz			
Peak Gain, Typical dBi	3.4 dBi	5.5 dBi	6.6 dBi	6.2 dBi	2.0 dBi			
Peak Gain, Maximum dBi	4.0 dBi	6.4 dBi	7.1 dBi	7.8 dBi	2.6 dBi			
Max Gain ± 30° Above Horizon, dBi	N/A	N/A	N/A	4.1 dBi	N/A			
VSWR*, Typical	< 1.9:1	< 1.5:1	< 1.3:1	< 1.3:1	< 1.6:1			
VSWR*, Max	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1			
Port-to-Port Isolation, Maximum (Typical)		UHF-LTE > 15 dB UHF-WiFi > 20 dB LTE-WiFi > 20 dB (	(31 dB)					
Nominal Impedance		50 Ohms						
Polarization		Vertical Linear						
Azimuth Beam Width		Omnidirectional						
Input Power, Max	put Power, Max		10 watt (ambient temp. of 25°C / 77°F					
Operating Temparture		- 30°C to + 70°C ( - 22°F to + 158°F )						
Storage Temparture		- 40°C to + 85°C ( - 40°F to + 185°F)						
Dimensions mm (inches)		98 x 70 x 160 ( 3.9"x 2.7" x 6.30")						
Weight Kg (lbs.)	Approximately 0.52 k		Kg (1.15 lbs.)					
Cable	LMR-100 ( 5.18 m		17 ft.)					
Radome Material		PC/ASA (Black)						
Baseplate Material		Aluminum						
Material Compliance RoHS		RoHS Compliant						
IP Dust & Water Ingress Rating IP67								

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# Phantom Fin Multiband Roof Mount Antenna

FHQ69273CD

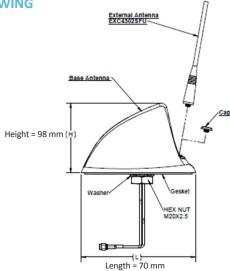
## **SPECIFICATIONS - GPS**

PARAMETER	PERFO	DRMANCE		
Frequency Band	1575.42 MHz (GPS L1)			
Band Width	6 MHz (Typical)			
Amplifier 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 to +85°C)			
Out-of-Band Signal Rejection	> 40 dB rejection @ ± 50 MHz from center frequency			
Intermodulation @ CW Mode (-40°C to +85°C)	Int1 - 10 (1842.8 MHz) - 10 (829.58 MHz) - 10 (755.42 MHz)	Int2 - 10 (2110 MHz) - 10 (2405 MHz) - 10 (820 MHz)	IM3 <- 100 (1575.6 MHz) <- 100 (1575.42 MHz) <- 100 (1575.42 MHz)	
Input 1 dB Compression @ 750 MHz, 2000 MHz & 3500 MHz	> 10dBm (-40°C to +85°C)			
Cable - Exposed Length	RG174-518.2 cm (17 ft.)			

#### **CONFIGURATION**

PART NUMBER	CONNECTOR:	GPS	LTE	WiFi	UHF
FHQ69273CD-518VC3		SMA-male	SMA-male	SMA-male	PL259
FHQ69273CD-518VC4		SMA-male	SMA-male	SMA-male	FME Plug
FHQ69273CD-518VC5		SMA-male	SMA-male	RPSMA-male	PL259
FHQ69273CD-518VC6		SMA-male	SMA-male	RPSMA-male	FME Plug

#### **ANTENNA DRAWING**



ANT-DS-PhantomFin\_FHQ69273CD\_0816

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