

Phantom Fin Multiband Roof Mount Antenna FHQ69273CD



Patent Pending

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		PERFORMANCE			
Antenna Model / No. of Ports:		FHQ69273CD 4 ports			
Port ID		4G/LTE Port		WiFi Port	
				UHF Port	
Frequency Bands, MHz		698-960 MHz	1710-2700 MHz	2400-2500 MHz	4900-5875 MHz
Peak Gain, Typical dBi		3.4 dBi	5.5 dBi	6.6 dBi	6.2 dBi
Peak Gain, Maximum dBi		4.0 dBi	6.4 dBi	7.1 dBi	7.8 dBi
Max Gain $\pm 30^\circ$ Above Horizon, dBi		N/A	N/A	N/A	4.1 dBi
VSWR*, Typical		< 1.9:1	< 1.5:1	< 1.3:1	< 1.3:1
VSWR*, Max		< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
Port-to-Port Isolation, Maximum (Typical)		UHF-LTE	> 15 dB (18 dB)	UHF-WiFi	> 20 dB (31 dB)
		LTE-WiFi	> 20 dB (23 dB)		
Nominal Impedance		50 Ohms			
Polarization		Vertical Linear			
Azimuth Beam Width		Omnidirectional			
Input Power, Max		10 watt (ambient temp. of 25°C / 77°F)			
Operating Temperature		- 30°C to + 70°C (- 22°F to + 158°F)			
Storage Temperature		- 40°C to + 85°C (- 40°F to + 185°F)			
Dimensions HxLxW mm (inches)		98 x 70 x 160 (3.9"x 2.7" x 6.30")			
Weight Kg (lbs.)		Approximately 0.52 Kg (1.15 lbs.)			
Cable		LMR-100 (5.18 m / 17 ft.)			
Radome Material		PC/ASA (Black)			
Baseplate Material		Aluminum			
Material Compliance		RoHS Compliant			
IP Dust & Water Ingress Rating		IP67			

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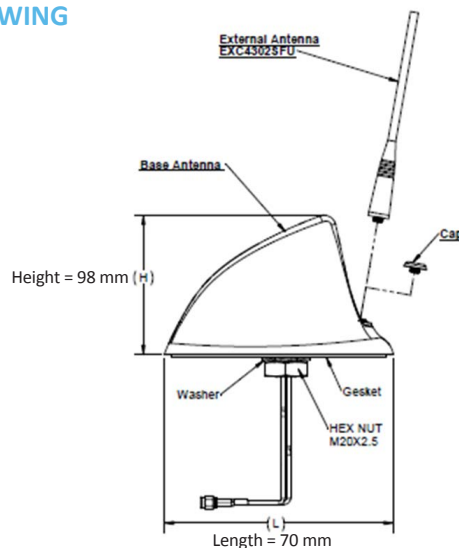
SPECIFICATIONS - GPS

PARAMETER	PERFORMANCE		
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	Int2	IM3
	- 10 (1842.8 MHz)	- 10 (2110 MHz)	<- 100 (1575.6 MHz)
	- 10 (829.58 MHz)	- 10 (2405 MHz)	<- 100 (1575.42 MHz)
	- 10 (755.42 MHz)	- 10 (820 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



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