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Patent Pending LPS69223NT

### LOW PROFILE SURFACE MOUNT 698-960/1710-2170 MHZ DISK-PUCK ANTENNA

The Laird Patent Pending LPS69223NT antenna is a multiband low profile omnidirectional diskpuck antenna operating over the 698-960 MHz and 1710-2170 MHz frequency bands. Designed to be a surface mount antenna that performs well on metallic and non-metallic\* surfaces, the antenna is ideal for use in Machine-to-Machine (M2M) applications. The housing incorporates a low profile, rugged design that conforms to IP67 standards making the antenna suitable for both indoor and outdoor applications.

#### FEATURES **V**ROHS

- Low Profile aesthetically neutral housing
- Surface mount with stud & locking nut
- Designed for both Indoor & Outdoor applications
- IP67 rated for harsh environmental applications

#### **BENEFITS**

- LTE and 3G/4G data communications in a single solution
- Applicable for both metal and non-metallic\* surface

#### MARKETS

- Machine-to-Machine (M2M)
- LTE & 3G/4G Cellular
- Utilities, Remote Monitoring, Kiosks & ATMs
- Warehouse, Offices & Meeting rooms
- Hotels, Museums, Libraries & Retail Malls
- Airport, Bus Terminals & Train Stations
- Other In-Building & Outdoor areas

### **SPECIFICATIONS**

PARAMETER	SPECIFICATION					
Frequency Bands, MHz	698-806	824-894	880-960	1710-1880	1850-1990	1910-2170
VSWR (Typ)	<2.8:1	<2.9:1	<2.6:1	<2.4:1	<1.7:1	<2.4:1
VSWR (Max)	3.0:1	3.0:1	3.0:1	3.0:1	3.0:1	3.0:1
Peak Gain, dBi (Typ)						
On Plastic Housing w/ Ground Plane Kit	2.9	1.9	2.3	4.7	3.9	3.0
On Metal Housing	2.3	1.4	1.9	4.1	4.0	3.9
Peak Gain, dBi (Max)						
On Plastic Housing w/ Ground Plane Kit	3.4	2.2	2.7	5.2	4.3	4.3
On Metal Housing	2.9	1.8	2.1	4.5	4.3	4.3
Nominal Impedance	50 Ω					
Max Power (ambient temp of 25°C)	10 Watts					
Azimuth Beam Width (deg)	Omnidirectional					
Polarization	Linear, Omnidirectional					
Radome	PC, UL94 V-0 Rating, Black					
Mounting Options - Ordered Separtely	HKIT- LPx-001 (Ground plane kit for non-metallic surface mounting)					
Dimensions (diameter x height)	127 mm x 29 mm (5.0" x 1.14") Gasket Thickness Not Included					
Weight	Approximately 0.20 kg (0.44 lbs.)					
Storage Temperature Range (°C)	-40° C to +85° C					
Operational Temperature Range (°C)	-30° C to +70° C					
Material Substance Compliance	RoHS Compliant					
Ingess Protection Rating	IP67					
Cable Type	RG316					

### **CONNECTORS**

	CABLE LENGTH	CONNECTOR
LPS69223NT-61SMAM	610 mm (24 in)	SMA- male
LPS69223NT-61RTNM	610 mm (24 in)	RTNC- male

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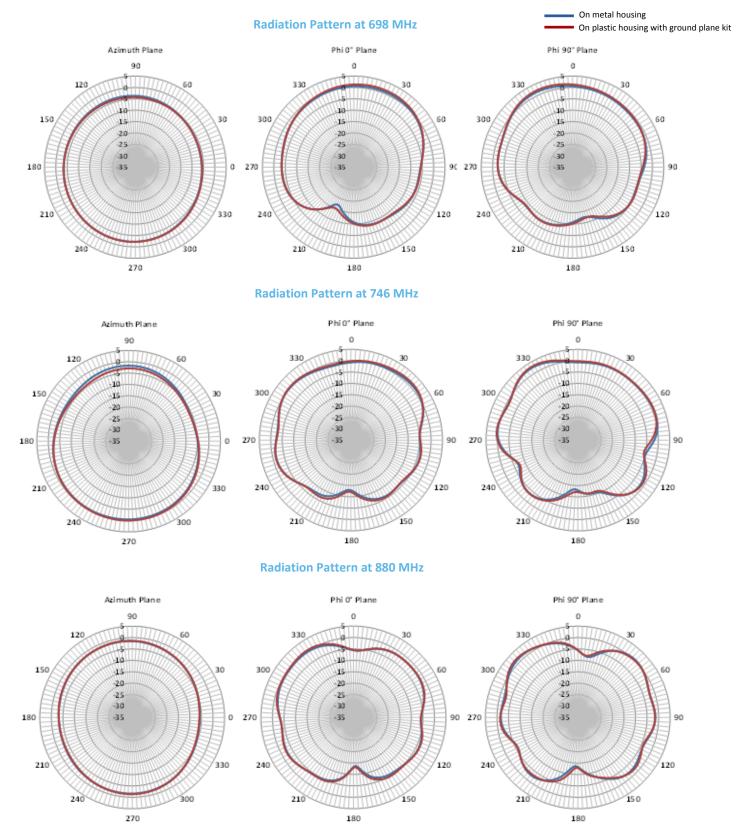
www.lairdtech.com

\*Requires a 300mm diameter Ground Plane Kit (order separately with P/N HKIT-LPx-001)



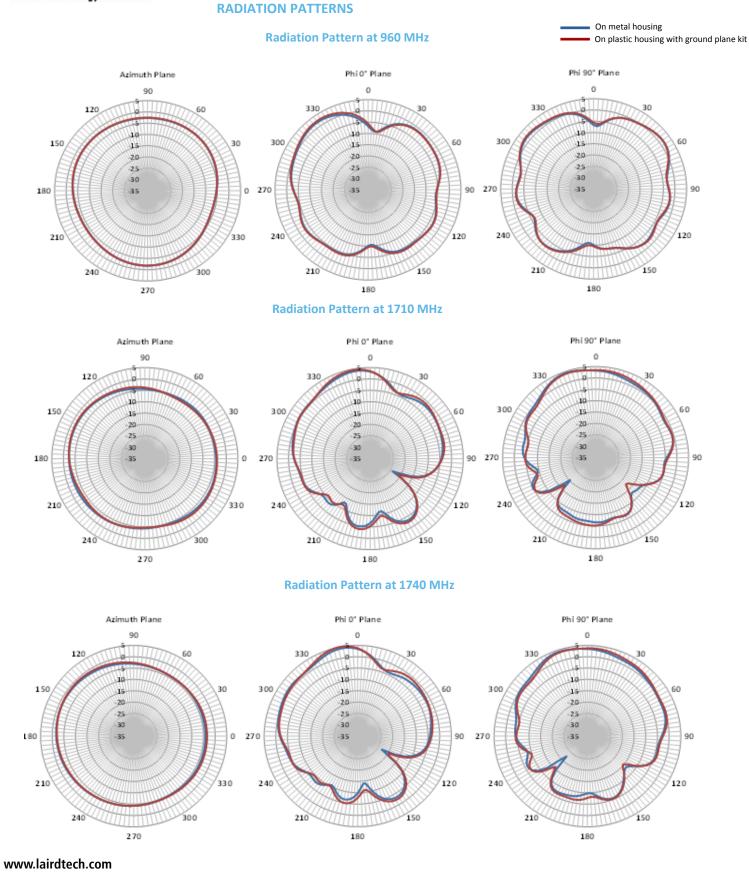
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**RADIATION PATTERNS** 



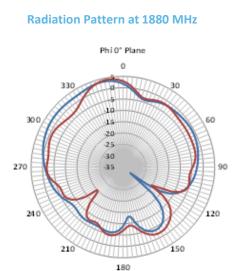


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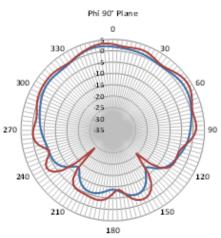




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**RADIATION PATTERNS** 



On metal housing

On plastic housing with ground plane kit

Azimuth Plane 

-20

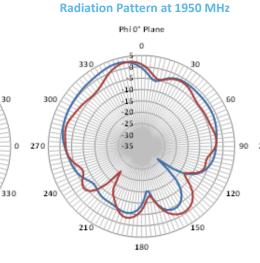
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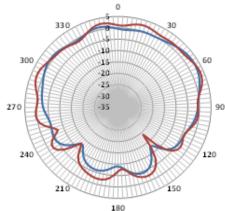
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-35

Azimuth Plane

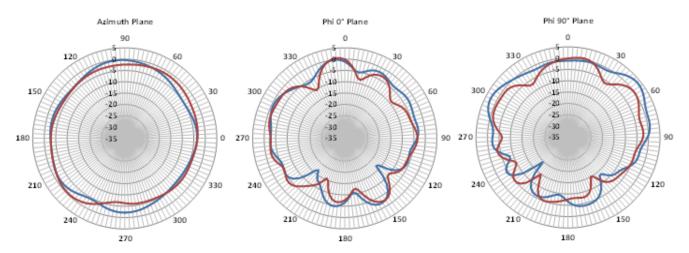
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Phi 90" Plane

**Radiation Pattern at 2110 MHz** 



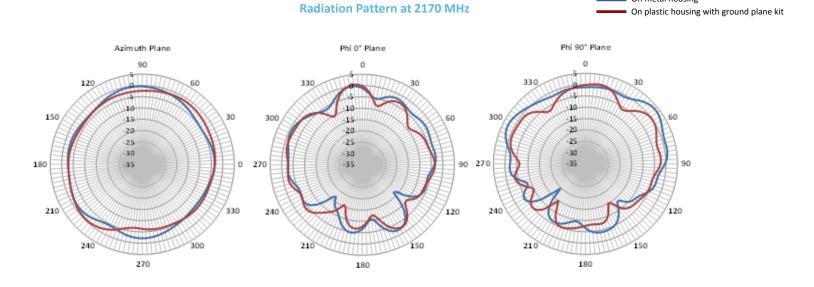
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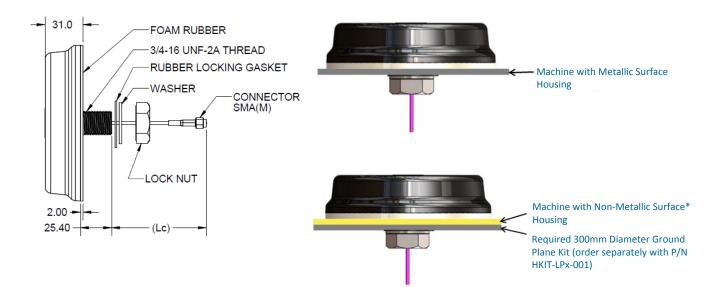
On metal housing

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### **RADIATION PATTERNS**



### **HOUSING CONFIGURATIONS**



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