



### **FEATURES AND BENEFITS**

- · Low profile aesthetically-neutral housing
- · Surface mount with stud and locking nut
- Equitable for both outdoor and indoor applications
- Cellular and 2G/3G data communications in a single solution
- Applicable for both metal and non-metal housings

# **LPS88213NT**

## Low Profile Disk Antenna 880-960 MHz/1710-2170 MHz

Laird Connectivity's LPS88213NT antenna is a multiband low-profile disk antenna operating over the 880-960 MHz and 1710-2170 MHz cellular bands. Designed to be a surface mount antenna that performs well on 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 solutions.

#### **APPLICATIONS**

- M2M
- Cellular
- Electric, gas, and water utilities
- · Remote monitoring, kiosks, and ATM
- Production monitoring and control
- Transportation, shipping hubs, and ports

Model Name	LPS88213NT				
Operating Frequency (MHz)	880-960	1710-1880	1850-1990	1910-2170	
VSWR - Avg					
On plastic housing	<2.3:1	<2.5:1	<1.8:1	<2.3:1	
On metal housing	<2.4:1	<1.4:1	<1.5:1	<2.5:1	
VSWR - Max	3.0:1	3.0:1	3.0:1	3.0:1	
Peak Gain - Typ (dBi)					
On plastic housing	2.3	1.7	2.0	2.5	
On metal housing	2.2	4.4	3.7	3.7	
Peak Gain - Max (dBi)					
On plastic housing	3.4	2.1	2.5	3.0	
On metal housing	2.5	5.0	3.9	3.9	
Nominal Impedance (Ohms)	50				
Max Power - Ambient 25°C (W)	10				
Polarization	Linear, vertical				
Horizontal Plane 3 dB Beamwidth	Omnidirectional				

MECHANICAL SPECIFICATIONS				
Dimensions - Diameter x Height - mm (inches)	90.0 × 26.0 (3.5 × 1.0)			
Weight - g (lbs.)	108.5 (0.24)			
Radome Material	PC, Black			

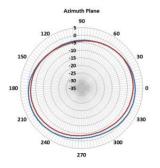
ENVIRONMENTAL SPECIFICATIONS				
Operating Environment (Indoor or Outdoor)	Indoor and outdoor			
Operating Temperature - °C (°F)	-30 to +70°C (-22 to +158°F)			
Storage Temperature - °C (°F)	-40 to +85°C (-40 to +185°F)			
Wind Survival - km/hr (mph)	200 (119.9)			
Ingress Protection Rating	IP67			
Material Substance Compliance	RoHS			

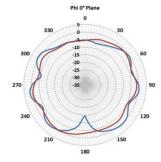
## **CONFIGURATION**

PART NUMBER	CABLE LENGTH	CONNECTOR
LPS88213NT-61SMAM	61 cm (24 in.)	SMA-male
LPS88213NT-61RTNM	61 cm (24 in.)	RTNC-male

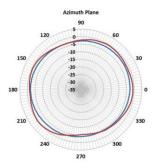
## **RADITION PATTERNS**

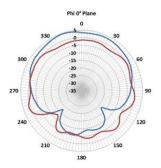
## 880 MHz



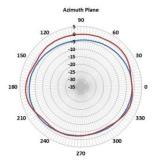


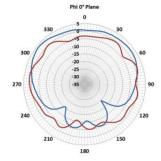
# 1710 MHz



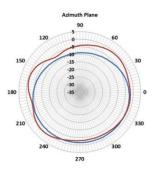


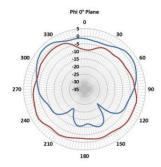
# 1910 MHz



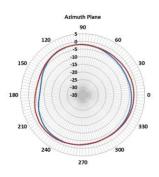


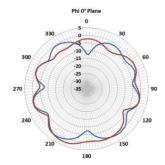
## 2170 MHz



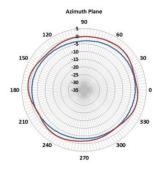


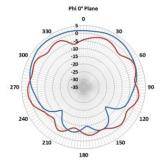
960 MHz



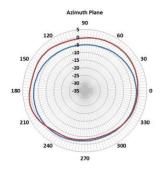


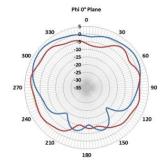
1850 MHz





### 1990 MHz





Antenna on Metal Housing
Antenna on Plastic Housing

#### TE TECHNICAL SUPPORT CENTER

USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 +52 (0) 55-1106-0800 Mexico: Latin/S. America: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 +33 (0) 1-3420-8686 France: Netherlands: +31 (0) 73-6246-999

#### te.com

TE Connectivity, TE Connectivity (logo) and Every Connection Counts are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

TE warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations Laird will, at its option, either repair or replace any part of its products that prove defective because of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the Laird product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.

©2021 TE Connectivity. All Rights Reserved.

10/21 Original

