

LPS82403NT Low Profile Disk Antenna



LOW PROFILE SURFACE MOUNT 824-894/1710-2170 MHZ DISK ANTENNA

Laird's LPS82403NT antenna is a multiband low profile disk antenna operating over the 824-894 MHz and 1710-2170 MHz cellular bands. Designed to be a surface mount antenna that performs well on metallic and nonmetallic 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.

FEATURES

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

BENEFITS

- Cellular and 2G/3G data communications in a single solution
- Applicable for both metal and non-metal housings

MARKETS

- M2M
- Cellular
- Utilities, Remote Monitoring, Kiosks, ATMs
- Warehouse, Offices and Meeting rooms
- Hotels, Museums, Libraries, Retail Malls
- Airport, Bus Terminals and train Stations
- Other in-building areas

RoHS

| PARAMETER | SPECIFICATION | |
|---|--|---------------|
| Model Number | LPS82403NT-61SMAM | |
| Frequency | 824-894 MHz | 1710-2170 MHz |
| Gain (on Metal Housing) | 2.39 (Max) | 5.48 (Max) |
| Gain (on Plastic Housing) | 1.86 (Max) | 3.42 (Max) |
| Average Efficiency (on Metal Housing) | 62% | 68% |
| Average Efficiency (on Plastic Housing) | 63% | 64% |
| VSWR | < 3:1 | |
| Max Input Power | 10W | |
| Radiation Pattern | Omnidirectional | |
| Polarization | Linear | |
| Nominal Impedance | 50 Ω | |
| Antenna Dimension | 26 (h) x 90 (dia.) mm (excludes gasket height) | |
| Weight | 108.5 g (with SMA connector) | |
| Connector | SMA male or RPTNC male | |
| Coaxial Cable | RG316 (609.6 mm Length) | |
| Wind Survival | 200 km/h | |
| Operational Temperature | -30°C to +70°C | |
| Storage Temperature | -40°C to +85°C | |
| Water/Foreign Body Ingress | IP67 | |
| RoHS Compliance | Yes | |

CONNECTORS

| MODEL NUMBER | CABLE LENGTH | CONNECTOR |
|-------------------|----------------|------------|
| LPS82403NT-61SMAM | 610 mm (24 in) | SMA- male |
| LPS82403NT-61RTNM | 610 mm (24 in) | RTNC- male |

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120

120

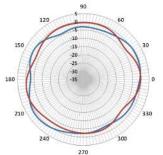
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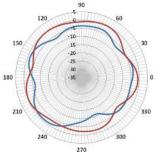
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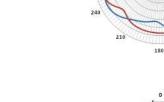
AZIMUTH PATTERNS





894 MHz Radiation Pattern



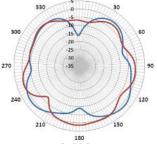


270

240

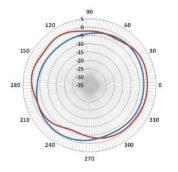
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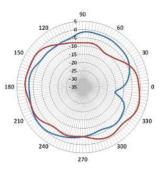


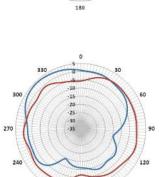
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1710 MHz Radiation Pattern



2170 MHz Radiation Pattern





180

ANT-DS-LPS82403NT 0913

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ELEVATION PATTERNS

20

270