



## S9025PL/S9025PR

### Mini RFID Panel Antenna 902-928 MHz

Laird Connectivity S9025PL/S9025PR are high-performance RFID antennas and the only UHF RFID antenna available to the market that offers no-compromise performance in a small package. At only 5.2" square, the antenna offers a gain specification of 5.5 dBi and axial ratio better than 2 dB. In effect, the antenna is providing the performance one would expect of a much larger antenna. The antenna is not only mechanically robust but is less likely to be exposed to excessive damage by virtue of its reduced size.

#### FEATURES AND BENEFITS

- Circularly polarized
- Low VSWR and axial ratio
- Rugged, ultra-heavy-duty construction
- IP67-rated
- Left-hand and right-hand CP versions
- Weather and UV resistant radome
- High performance in a small package
- Wide range of connector and cable options

#### APPLICATIONS

- Warehouse
- Distribution center
- Airports and hospitals
- Transit terminals
- Conveyer belt

#### ELECTRICAL SPECIFICATIONS

|                                 |                            |
|---------------------------------|----------------------------|
| Antenna Model                   | S9025PR/S9025PL            |
| Operating Frequency (MHz)       | 902 - 928                  |
| VSWR - Max                      | 1.5:1                      |
| Gain (dBi)                      | 5.5                        |
| Nominal Impedance (Ohms)        | 50                         |
| Max Power - Ambient 25°C (W)    | 10                         |
| Polarization                    | Circular RH or Circular LH |
| Horizontal Plane 3 dB Beamwidth | 100°                       |
| Front-to-Back Ratio (dB)        | 8                          |
| Axial Ratio - Typical (dB)      | 2.0                        |

#### MECHANICAL SPECIFICATIONS

|  |   |
|--|---|
| Dimensions - length x width x height - mm (inches) | 132.1 x 132.1 x 17.8 (5.2 x 5.2 x .71)                  |
| Weight - kg (lbs.)                                 | .37 (.8)  |
| Mounting Style                                     | Threaded Stud 2x #10-32                                 |
| Radome Material                                    | White High Strength PC                                  |
| Lightning Protection                               | DC Grounded   |
| Connector Type                                     | Type N-Female, RP-TNC Female, RP-SMA-Female, SMA-Female |

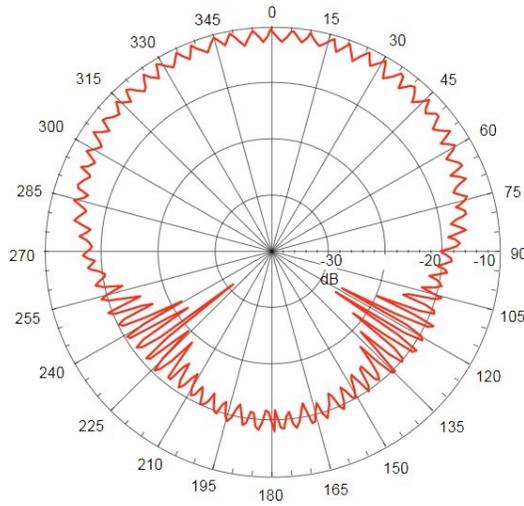
## ENVIRONMENTAL SPECIFICATIONS

|                                 |                              |
|---------------------------------|------------------------------|
| Operating Temperature - °C (°F) | -30 to +70°C (-22 to +158°F) |
| Storage Temperature - °C (°F)   | -40 to +85°C (-40 to +185°F) |
| Impact Resistance               | 1 lb. ball drop, 24"         |
| Salt                            | MIL-STD-810                  |
| Vibration                       | MIL-STD-810                  |
| Shock                           | IEC 68-2-27                  |
| Humidity                        | IEC 68-2-27                  |
| Ingress Protection Rating       | IP67                         |

## CONFIGURATION

| PART NUMBER   | POLARIZATION | CONNECTOR               |
|---------------|--------------|-------------------------|
| S9025PLNF     | LHCP         | N Female                |
| S9025PLRASMAF | LHCP         | Right Angle, SMA Female |
| S9025PLRTN    | LHCP         | RP TNC                  |
| S9025PLSMF    | LHCP         | SMA Female              |
| S9025PRNF     | RHCP         | N Female                |
| S9025PRRASMAF | RHCP         | Right Angle, SMA Female |
| S9025PRRTN    | RHCP         | RP TNC                  |
| S9025PRSMF    | RHCP         | SMA Female              |

## RADIATION PATTERNS



### TE TECHNICAL SUPPORT CENTER

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