

ALR-A0501

COMPACT 5" 6DBIC ANTENNA

The Alien Technology® ALR-A0501 is a compact 5" x 5", 6dBic gain circular-polarized antenna for use in applications where footprint is critical or a small to medium read distance is preferred.

FEATURES

- Small Footprint
- Dust and spray resistant radome (IP67)
- SMA female connector
- RoHS EU 2002/95/EC compliant

APPLICATIONS

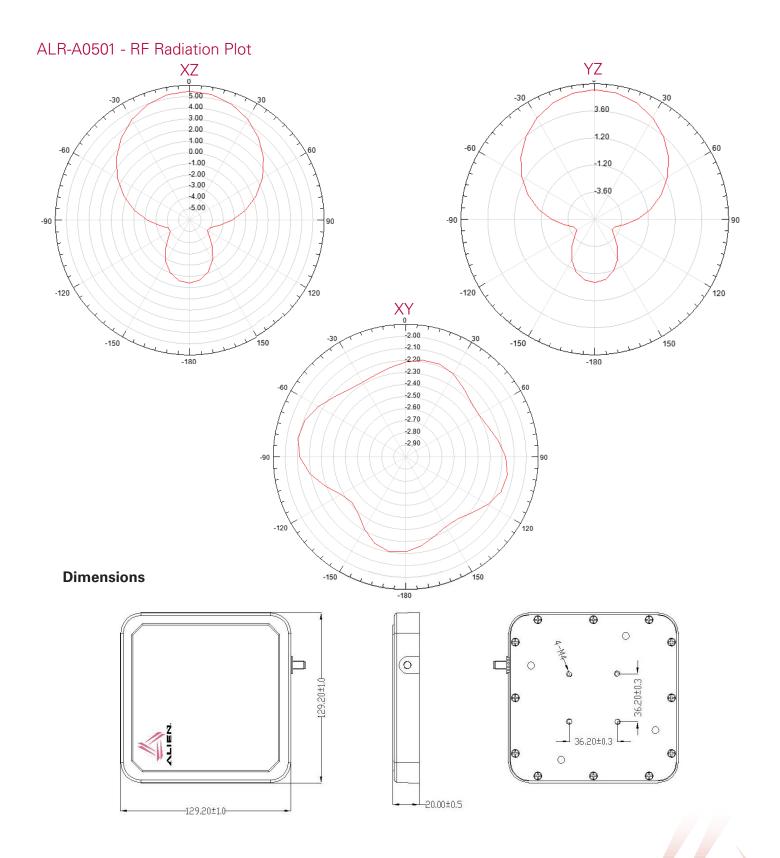
- Tag Commissioning
- Distribution centers
- Airports and hospitals
- Transit terminals
- Warehouses

| Benefit | Enabled By: | What does this mean to me? |
|---|---|---|
| Built to keep the dust and moisture out | Weather and UV resistant | Designed for a variety of inside and outside applications that demand a robust IP67 antenna |
| Space Efficient | Small SMA Connector and small 5" x 5" footprint | Fits into space constrained areas. |



The Alien Technology's ALR-A0501 antenna is small footprint (5" square) 6dBi gain, circularly polarized panel antenna that provides reception and transmission of signals either in the in the 902-928 MHz frequency band or the 865-868 MHz frequency band. The design methodology achieves maximum efficiency and performance across the entire frequency band and tag orientations.

Both VSWR and axial ratios are both excellent and allow the user to achieve the maximum performance for an antenna of this size. The antenna is housed in a heavy duty radome enclosure to protect from dust and moisture ingress.





Ordering Information

| Model # | Description | |
|-------------|--------------|--|
| ALR-A0501-F | FCC Version | |
| ALR-A0501-E | ETSI Version | |

Specifications

| Parameter | ALR-A0501-F | ALR-A0501-E | |
|--------------------------|--|---------------|--|
| Frequency Range | 902 - 928 MHz | 865 - 868 MHz | |
| Gain | 6dBic | | |
| Maximum VSWR | ≤ 1.3:1 | | |
| 3 dB Beamwidth - Azimuth | 105° x 105° | | |
| Front to Back Ratio | 5.6 dB | | |
| Polarization | Circular Right | | |
| Maximum Input Power | 10 Watts (40dBm) | | |
| Input Impedance | 50 ohms | | |
| Axial Ratio | <1.5dB | | |
| Weight | 0.66 lbs (0.30 Kg) | | |
| Mechanical Size | 5.04" x 5.04" x 0.79" (128 x 128 x 20mm) | | |
| Antenna Connection | SMA Female (no cable) * | | |
| Radome | ABS | | |
| Mount Style | Thread Stud | | |
| Operating Temperature | -13 to 158°F (-25°C to +70°C) | | |
| Lightning Protection | DC Grounded | | |
| Environmental Rating | IP 67 | | |

^{*} Alien® recommends ALX-421-6 cable (not included) to ensure compliance with local regulations. Other options listed below

Antenna Cable Options (Not Supplied with Antenna)

| Model # | Description | Comment |
|-----------|---|--|
| ALX-421-3 | 3 METER SMA M to RP-TNC M Antenna Cable | Per FCC, professional installation is required to ensure compliance with local regulations |
| ALX-421-6 | 6 METER SMA M to RP-TNC M Antenna Cable | Default solution for Alien Antenna |
| ALX-421-9 | 9 METER SMA M to RP-TNC M Antenna Cable | |

Copyright © 2017 Alien Technology, LLC. All rights reserved.

Alien, Alien Technology and the Alien Technology logo are trademarks or registered trademarks of Alien Technology, LLC. in the U.S. and other countries.

HANDLING PRECAUTIONS Observe standard handling practices to minimize ESD.

DISCLAIMER Application recommendations are guidelines only - actual results may vary and should be confirmed. This is a general purpose product not designed or intended for any specific application.

This product is covered by one or more of the following U.S. patents: 7716208, 7716109, 7888206, 7871720, 7659822, 7619531, 76195479, 7598867, 7580378, 7578656, 7562083, 7561221, 7559486, 7559131, 7554451, 7411503, 7385284, 7377445, 7364084, 7365869, 724061, 7321159, 7301488, 7259114, 7288432, 7265675, 7262686, 7215249, 7214569, 7195227, 7193504, 7173259, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 69986184, 69980184, 6970219, 6952157. Other patents pending.

