



# 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.

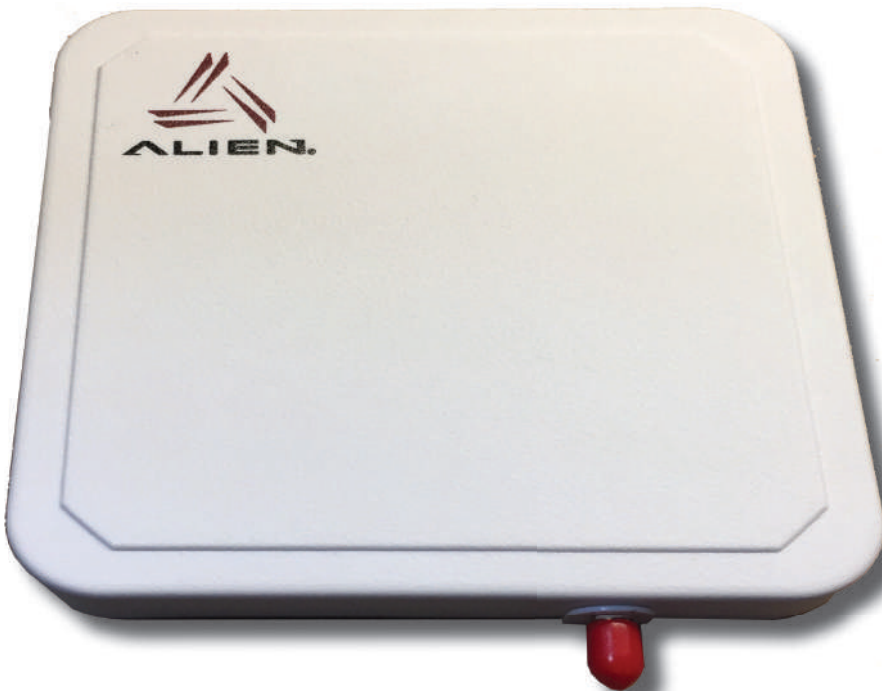
### FEATURES

- 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 <b>robust IP67 antenna</b>
Space Efficient	Small SMA Connector and small 5" x 5" footprint	Fits into space constrained areas.



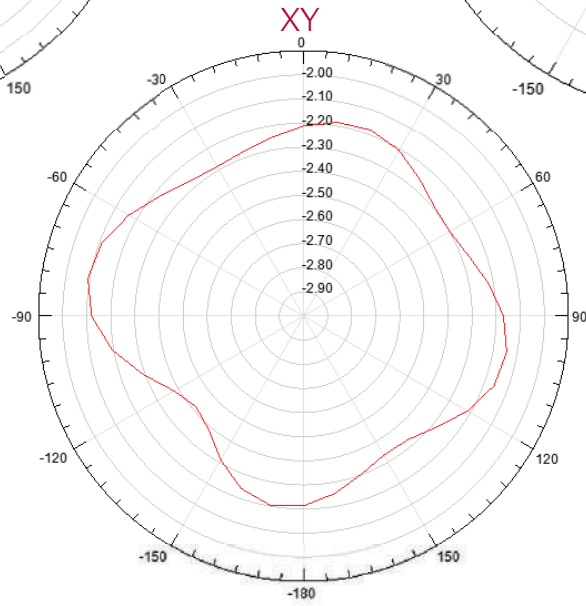
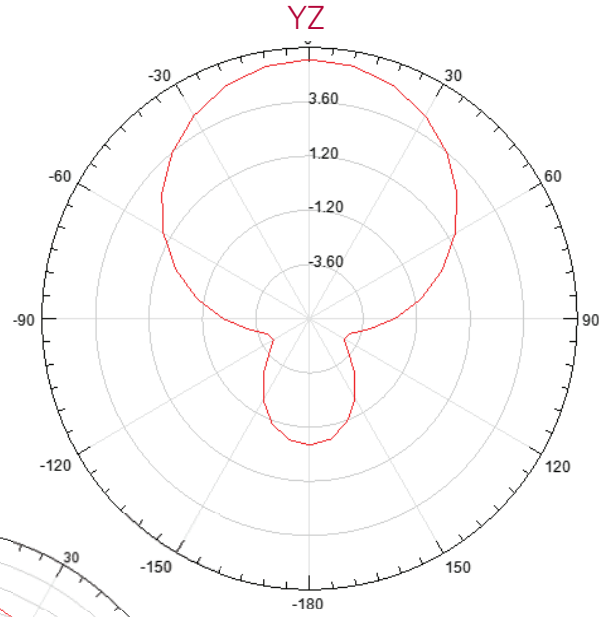
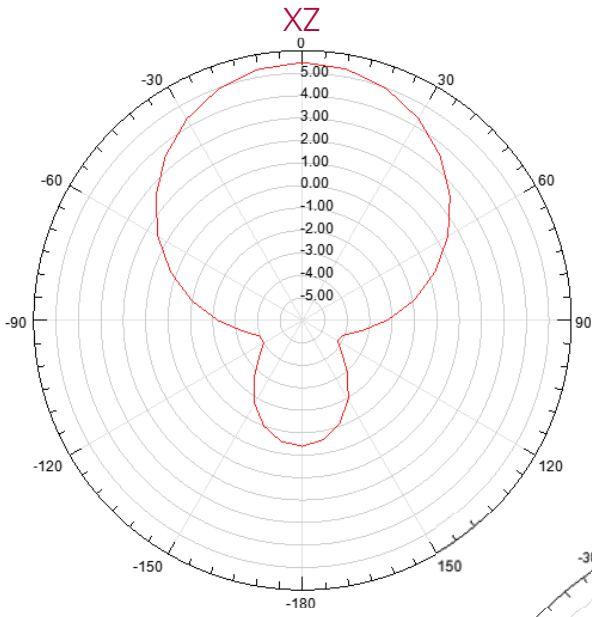
The Alien Technology's ALR-A0501 antenna is small footprint (5" square) 6dBi gain, circularly polarized panel antenna that provides reception and transmission of signals either in the in the 902-928 MHz frequency band or the 865-868 MHz frequency band. The design methodology achieves maximum efficiency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

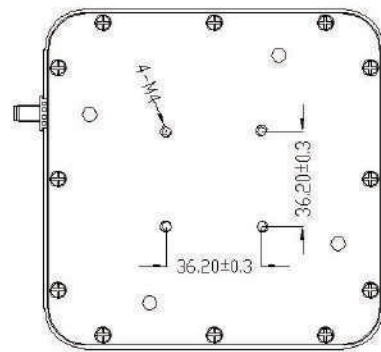
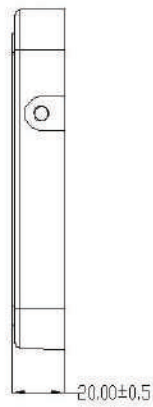
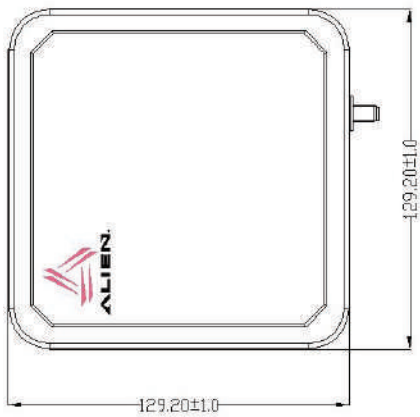


# ALR-A0501 COMPACT 5" 6DBIC ANTENNA

ALR-A0501 - RF Radiation Plot



## Dimensions





# ALR-A0501 COMPACT 5" 6dBIC ANTENNA

## 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	

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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, 7716160, 7688206, 7671720, 7659822, 7619531, 7615479, 7599867, 7580378, 7576656, 7562063, 7561221, 7559486, 7559131, 7554451, 7411503, 7385284, 7377445, 7364084, 7353598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7262686, 7215249, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 6998644, 6988667, 6985361, 6980184, 6970219, 6952157. Other patents pending.

February 28, 2017



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