



# ALR-8697 & ALR-8698

## LOW VSWR/AXIAL RATIO ANTENNAS

The Alien Technology ALR-8697 and ALR-8698 are a high-performance, worldwide, circular-polarized antenna for use in demanding applications. Both antenna utilize the same form-factor but offer different gain. The ALR-8697 is a 8.5dBic gain antenna for use with all Alien fixed readers and the ALR-8698 is a 11dBic (US)/ 10dBic (EU) gain antenna for use with Alien's mid-range readers.

### FEATURES

- Extremely low VSWR and axial ratio
- Wide band antenna for worldwide applications
- Low Profile
- Weather and UV resistant radome (IP67)
- Reverse polarity TNC connector
- RoHS EU 2002/95/EC compliant

### APPLICATIONS

- Warehouses
- Distribution centers
- Airports and hospitals
- Transit terminals
- Conveyer belts

Benefit	Enabled By:	What does this mean to me?
Wide band antenna	865 - 928 MHz antenna	Single antenna for worldwide usage
A thin antenna with no protrusions	Low profile	Enables mounting where objects may otherwise hit or damage a larger antenna
Built to keep the elements out	Weather and UV resistant	Designed for a variety of inside and outside applications that demand a <b>robust IP67 antenna</b>
Highly efficient antenna	Extremely low VSWR and axial ratio	Read tags in challenging environment and/or at greater distances. Very robust read capability regardless of tag orientation.

The Alien Technologies ALR-8697 and ALR-8698 antennas are circularly polarized panel antenna that provides reception and transmission of signals in the 865-928 MHz frequency band. The design

methodology achieves maximum efficiency and performance across the entire frequency band and tag orientations.



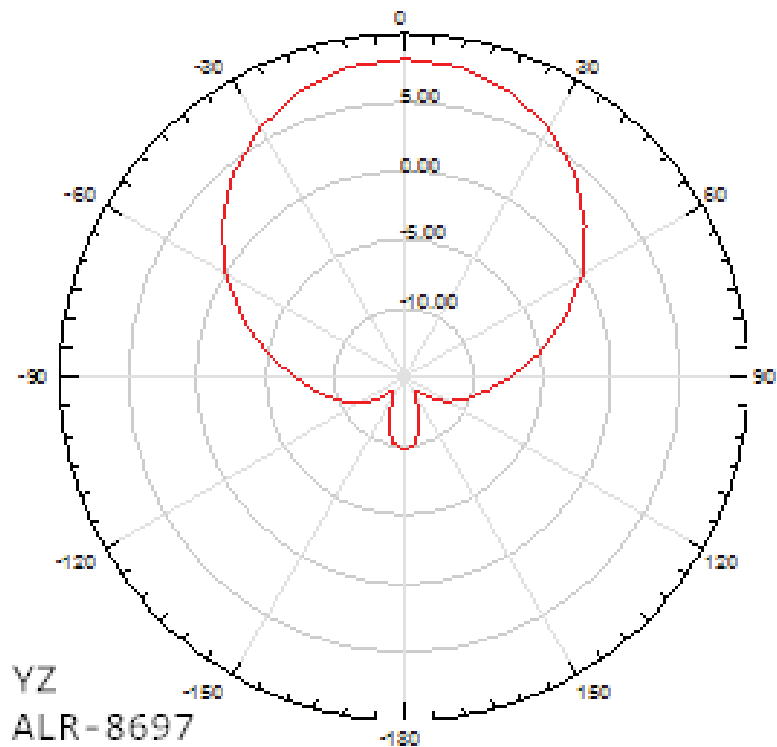
Both VSWR and axial ratios are both excellent and allow the user to achieve the maximum performance for an antenna of this type. The antenna is housed in a heavy duty radome enclosure that can be directly wall mounted via standard VESA mounting techniques.

Both antenna have exactly the same footprint so can be interchanged if needed and both have the same inset reverse TNC connector that helps to protect it from knocks and damage.

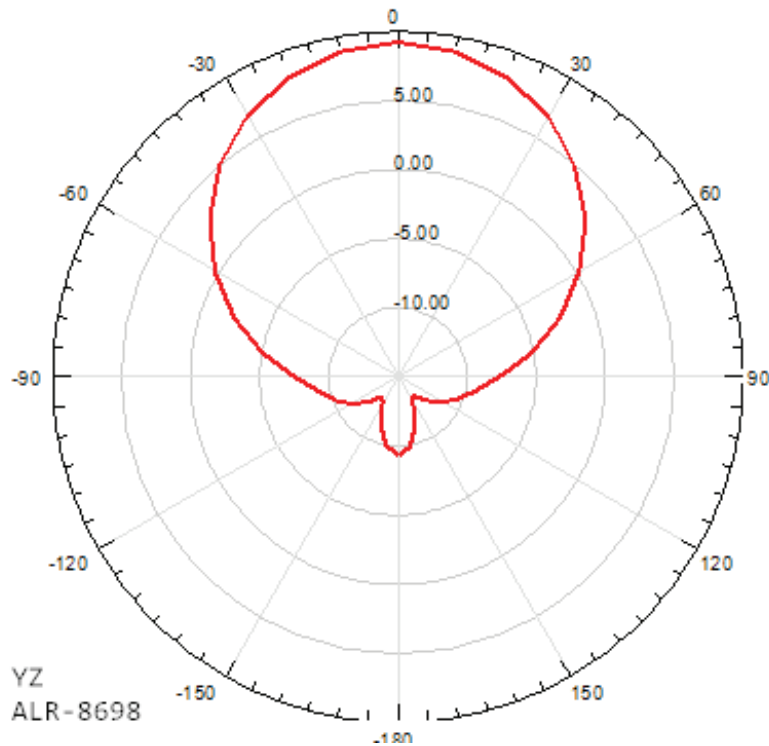


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ALR-8697 - RF Radiation Plot



ALR-8698 - RF Radiation Plot



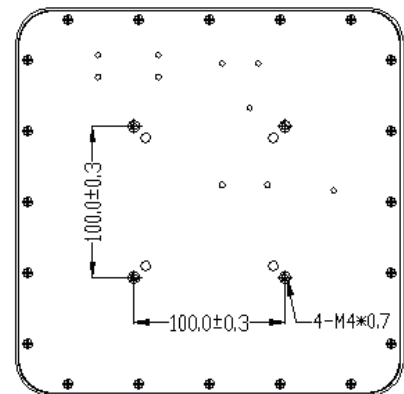
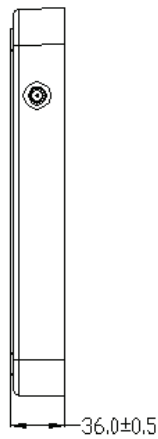
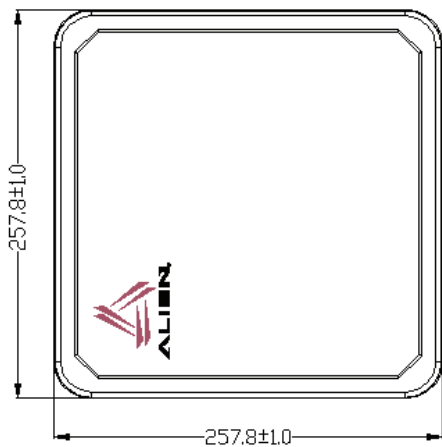


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## Specifications

Parameter	ALR-8697	ALR-8698
Frequency Range	865 - 928 MHz	
Gain	≥8.5 dBic	≥11dBic FCC / ≥10dBic ETSI
Maximum VSWR	≤ 1.3:1	
3 dB Beamwidth - Azimuth	70° x 70°	
Front to Back Ratio	20 dB	
Polarization	Circular Right-hand	
Maximum Input Power	33dBm	
Input Impedence	50 ohms	
Axial Ratio	1.2dB	
Weight	2.0 lbs (0.91 Kg)	
Mechanical Size	10.16" x 10.16" x 1.42" (258 x 258 x 36mm)	
Antenna Connection	Inset Rev TNC Male (no cable)	
Radome	High Strength ASA	
Mount Style	100mm VESA mounting holes	
Temperature operational	-40°C to +70°C	
Humidity	5-95% Non Condensing	
Lightning Protection	DC Grounded	
Environmental Rating	IP 67	

## Dimensions



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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, 7882206, 7871720, 7659822, 7619331, 7615479, 7538867, 7580378, 7576656, 7562063, 7561221, 7559486, 7559131, 7554451, 7411503, 7385294, 7377445, 7364084, 7353598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7265675, 7262686, 7215249, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 6998644, 6988667, 6985361, 6980184, 6970219, 6952157. Other patents pending.

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