



# ALR-A1001

## ULTRA SLIM 8.5dBIC ANTENNA

The Alien Technology® ALR-A1001 is a high-performance, circular-polarized antenna for use in demanding applications. The ALR-A1001 is a 8.5dBic gain antenna for use with Alien®'s readers.

### FEATURES

- Very Low Profile
- Up to 9m / 29 ft. read range
- Extremely low VSWR and axial ratio
- Weather and UV resistant radome (IP67)
- SMA female connector
- RoHS EU 2002/95/EC compliant

### APPLICATIONS

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

Benefit	Enabled By:	What does this mean to me?
A thin antenna with no protrusions	Low profile, just 14mm/0.55" thick	Enables mounting where objects may otherwise hit or damage a larger antenna
Built to keep the elements out	Weather and UV resistant and IP67 rating	Designed for a variety of inside and outside applications that demand a robust antenna
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 Technology's ALR-A1001 antenna is circularly polarized panel antenna that provides reception and transmission of signals either in the 865-867 ETSI (ALR-A1001-E-x) or 902-928 MHz FCC (ALR-A1001-F-x) frequency band. The design achieves maximum efficiency and performance across the entire frequency band and all tag orientations.

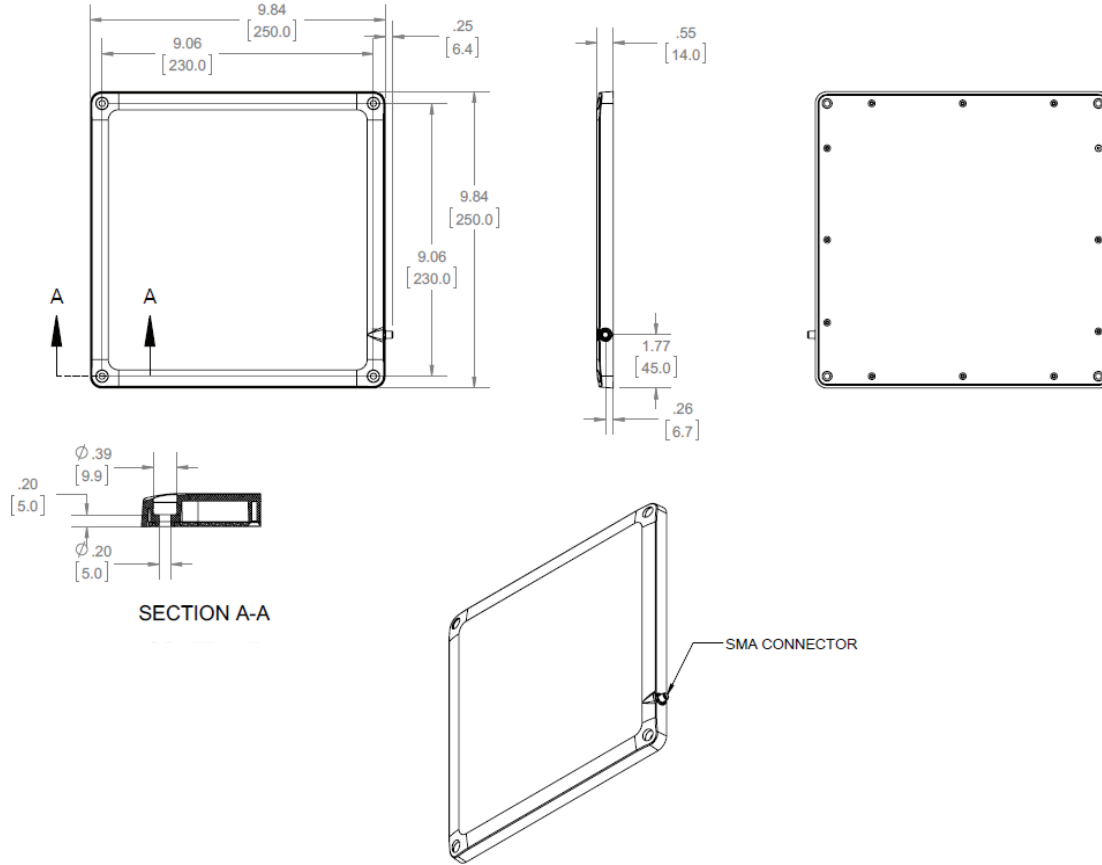


VSWR and axial ratios are both excellent and allow the user to achieve the maximum performance for an antenna of this type. The antenna is housed in a heavy duty radome enclosure with options for direct wall mounting via flush through-hole (ALR-A1001-x-S) or VESA studded (ALR-A1001-x-V) mounting techniques.

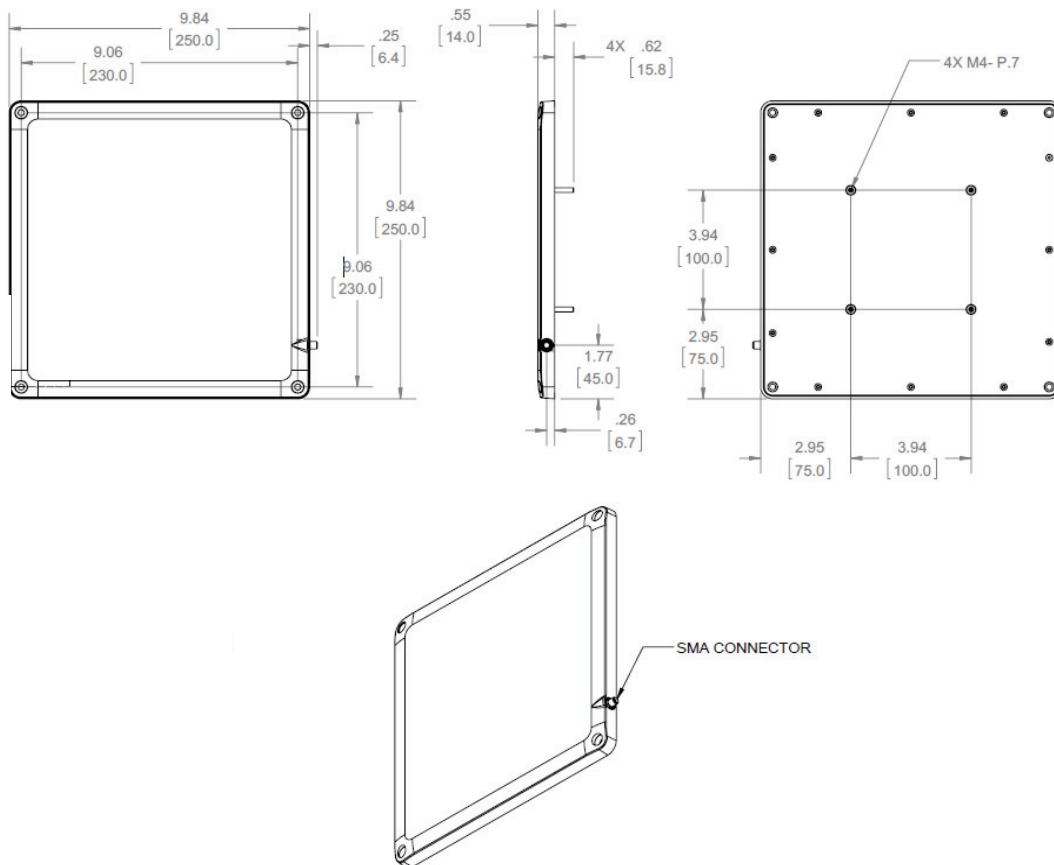


# ALR-A1001 ULTRA SLIM 8.5DBIC ANTENNA

## Dimensions - Standard Flush mount (ALR-A1001-x-S)



## Dimensions - VESA Stud mount (ALR-A1001-x-V)





# ALR-A1001 ULTRA SLIM 8.5dBIC ANTENNA

## Ordering Information

Model #	Description
ALR-A1001-F-S	FCC / Standard Flush Mount
ALR-A1001-F-V	FCC / VESA Stud Mount
ALR-A1001-E-S	ETSI / Standard Flush Mount
ALR-A1001-E-V	ETSI / VESA Stud Mount

## Specifications

Parameter	ALR-A1001-F-x	ALR-A1001-E-x
Frequency Range	902 - 928 MHz	865 - 867 MHz
Gain	8.5dBic	
Maximum VSWR	≤ 1.3:1	
3 dB Beamwidth - Azimuth	68° x 68°	
Front to Back Ratio	20 dB	
Polarization	Circular Right-hand	
Maximum Input Power	3 Watts (34dBm)	
Input Impedence	50 ohms	
Axial Ratio	2dB typical ; 4dB Max	
Weight	1.6 lbs (0.75 Kg)	
Mechanical Size	9.84" x 9.84" x 0.55" (250 x 250 x 14mm)	
Antenna Connection	SMA Female (no cable) *	
Radome	UV-Resistant ABS	
Mount Style	Standard Flush (ALR-A1001-x-S) or 100mm VESA (ALR-A1001-x-V)	
Operating Temperature	-20° to +55°C / -4° to +131°F	
Storage Temperature	-30° to +65°C / -22° to +149°F	
Humidity	5-85% Non Condensing	
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, 7682206, 7671720, 7659822, 7619531, 7615479, 7598867, 7580378, 7576656, 7562083, 7561221, 7559486, 7559131, 7554451, 7411503, 7385284, 7377445, 7364084, 7353598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7265675, 7262886, 7215249, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 6998644, 6988667, 6985361, 6960184, 6970219, 6952157. Other patents pending.

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