



Product Family | Circularly Polarized RFID Antenna (902-928 Mhz)  
Product Code | VUL-60010

# A5020

# CIRCULAR POLARIZED

# ANTENNA

The Vulcan RFID™ A5020 Circular Polarized Antenna is a robust and aesthetically pleasing UHF RFID antenna with a compact square footprint of only 150 mm (5.9 in).

The **IP68 rating** allows the A5020 to excel in permanent outdoor applications, and the **ultra-low profile design** blends the antenna beautifully into interiors and customer facing environments.

The 1.5 ft read range enables this antenna to be a multi-purpose workhorse compared to other antennas of similar size. That versatility allows the Vulcan RFID™ A5020 Antenna to be used in a variety of applications, such as:

- Kiosks and Point of Sale
- Waste Management
- Space-constrained Retail
- Medical & Pharmaceutical





# Specifications

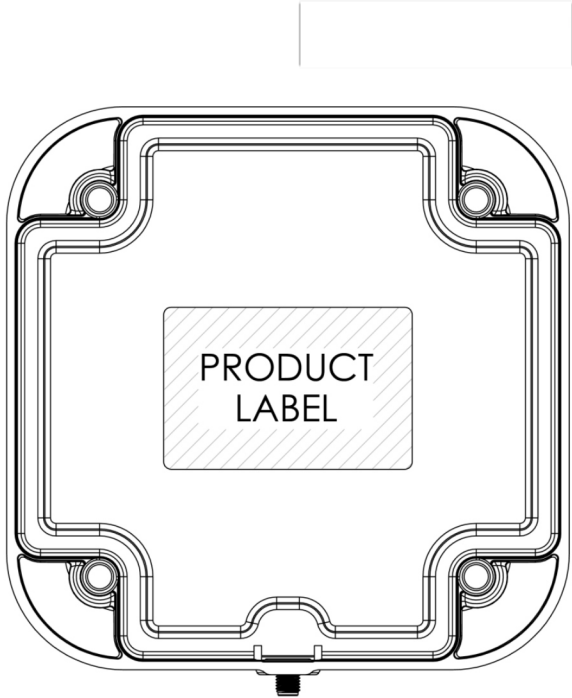
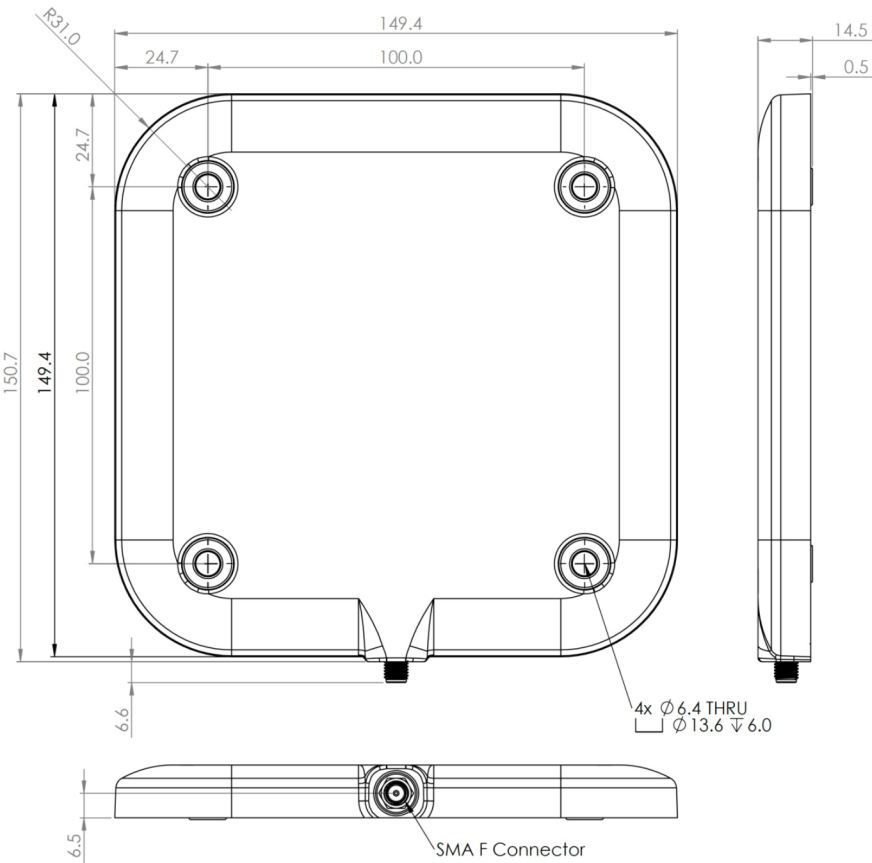
<b>ELECTRICAL</b>	Operating Frequency:	FCC (902-928 Mhz)
	Polarization:	Right hand circular
	Gain:	5.5 dBic
	Max Read Distance:	Up to 4.3 m (14 ft)
	Elevation Beamwidth:	115°
	Azimuth Beamwidth:	115°
	VSWR:	1.4 typical
	Front to Back Ratio:	-10 dB
	Axial Ratio:	1 dB typical
	Nominal Impedance:	50 Ω
	Anti-Static Protection:	DC grounded
	Antenna Detection:	10 K Ω resistance
	Maximum Input Power:	3 W

<b>MECHANICAL</b>	Connector Type:	SMA female (connects to SMA male)
	Mounting:	Flush or VESA mount
	Cable:	Not included
	Dimensions:	150 x 150 x 14 mm (5.9 x 5.9 x 0.55 in)
	Weight:	0.25 kg (0.55 lbs)
	Radome Material:	UV-Resistant ABS

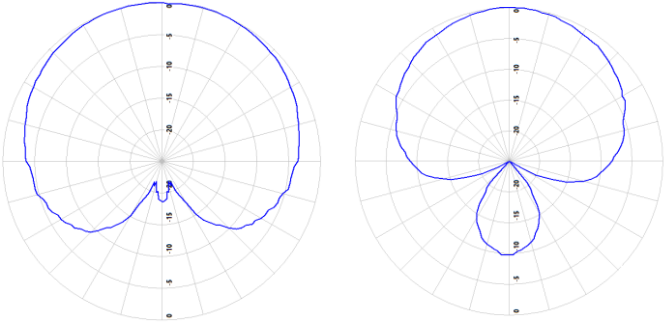
<b>ENVIRONMENT</b>	Operating Temperature:	-40° to +65°C (-40° to +149°F)
	IP Rating:	IP 68



# Diagrams



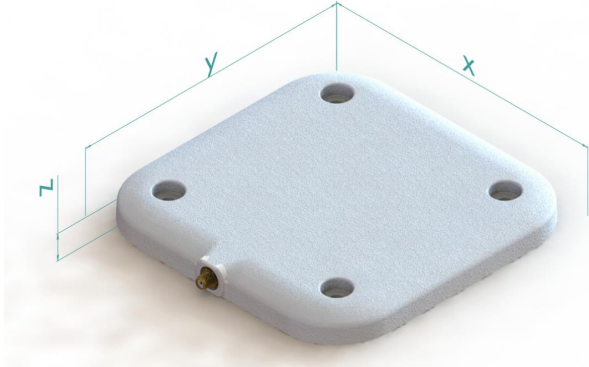
E-field Radiation Pattern



XZ-plane

YZ-plane

Antenna Planes





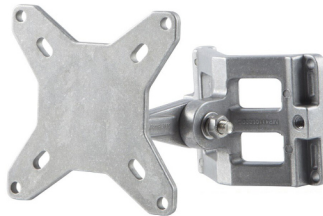
## Accessories & Compatible Products

Vulcan RFID™



VUL-MAPPER

Vulcan RFID™



VUL-HDMNT-100MM

Vulcan RFID™



195-RP-TNC-M-SMA-M-12  
240-RP-TNC-M-SMA-M-25  
400-RP-TNC-M-SMA-M-35

\*For custom cable connectors or lengths please [contact us](#).

## About Vulcan RFID™ Products

Vulcan RFID™ offers a broad range of innovative RFID antennas, RFID inlays, custom RFID tags, and accessories suited for a wide variety of industries and applications. With an extensive portfolio, Vulcan RFID™ products are manufactured to withstand environments ranging from mild to extreme. All Vulcan RFID™ products are thoroughly tested and built on a name you can trust. Vulcan RFID™ products enable you to reach and sustain high levels of performance with your UHF or NFC frequency application.



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