

## HB Radiofrequency Wideband Adhesive Mounted Antenna

### Product Code

VADH-6927-2.SA1

### Polarisation

Vertical (V)

### Design Type

Microstrip Patch

### Application Category

IoT/M2M

### RF Category

Cellular



The VADH-6927-2 wideband adhesive mount antenna is a moderate performance cellular antenna covering most worldwide 3G/4G cellular bands between 698 and 2690 MHz. The antenna has a compact design permitting unobtrusive and convenient installation in automotive vehicles. The antenna has been certified to IP53 ingress protection rating making it suitable for a range of industrial IoT and M2M applications.

Commonly adhesive microstrip antennas are optimised for performance on the upper 1710 to 2690 MHz band. This model has been designed specifically for high efficiency on the lower 698 to 960 MHz band making it ideal for NB-IoT, eMTC, LoRa, and other low frequency technologies.

This antenna has been exclusively designed for HB Radiofrequency as an economical solution for large scale projects requiring absolute consistency in manufacturing to ensure repeatable, known performance across the project roll-out. Batch test reports are made available ensuring project performance criteria are met every time.

Two of these antennas separated > 150 mm from each other are suitable for the LTE nominal MIMO applications.

- Ground plane independent
- Low unit cost, suits price sensitive applications
- Wideband covering most cellular bands between 698 and 2700 MHz
- Extremely low profile design, adhesive mounted for easy installation
- 1.5 metre RG174 cable with SMA Male connector
- IP53 ingress protection rating
- Fully customisable cable length and connector

# Antenna Technical Data

## Physical Characteristics

Construction Material	ABS Plastic	RF Connections	1
Radome Colour	Other - Black	Environmental Rating	IP53
Dimensions	141 x 25 x 7 mm (H x W x D)	Operating Temperature	-40 °C to 85 °C
Weight	0.0590 kg	Mounting	3M Adhesive pad

## Wideband Microstrip Element

Electrical Specifications		Mechanical Specifications	
Input Impedance	50 Ω	Input Connector	SMA
Polarisation	Vertical (V)	Input Connector Gender	Male
Max. Input Power	10 W	Cable Series	RG-174
PIM, 3rd Order	-	Cable Length	1500 mm
<b>Range: 698 to 960 MHz</b>			
Peak Gain	2.00 dBi	Azimuth Beamwidth	360°
VSWR	< 2.5:1	Elevation Beamwidth	90°
Radiation Efficiency	60%	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	-
Cross-Polar Discrimination	-		
<b>Range: 1710 to 2690 MHz</b>			
Peak Gain	2.00 dBi	Azimuth Beamwidth	360°
VSWR	< 2.5:1	Elevation Beamwidth	70°
Radiation Efficiency	40%	Electrical Tilt	0°
Front-to-Back Ratio	-	Inter-Port Isolation	-
Cross-Polar Discrimination	-		



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