

# Tri-Band GSM Antenna

VERSION: 3.5

GSM 900 (925 – 960 MHz)  
GSM 1800 and 1900 (1805 – 1990 MHz)  
Product Code: OMNI-A0075 and  
OMNI-A0134



## SPECIFICATIONS:

<b>Electrical:</b>	
Frequency range	925 – 960 MHz (GSM 900) 1805 – 1880 MHz (GSM 1800) 1930 – 1990 MHz (GSM 1900)
VSWR	< 2.5:1
Nominal input impedance	50 Ω
Connector	N-type male
Feed power handling	50 W
Gain (max)	5 dBi ± 0.5 dB (GSM 900) 6 dBi ± 0.5 dB (GSM 1800) 6 dBi ± 0.5 dB (GSM 1900)
Gain (min over the band)	4 dBi (GSM 900) 5.0 dBi (GSM 1800) 5.0 dBi (GSM 1900)
E-plane 3 dB beamwidth	40° ± 10° (GSM 900) 30° ± 10° (GSM 1800/1900)
H-plane 3 dB beamwidth	360°
Polarisation	Vertical
<b>Mechanical:</b>	
	<b>OMNI-A0075</b> <b>OMNI-A0134</b>
Dimensions (l x d)	555 mm x 33 mm      710 mm x 33 mm
Weight	360 g      450 g
Mounting method	N-type male connector
<b>Environmental: designed to meet the following specifications</b>	
Wind survival	120 km/h
Temperature (operational)	- 20 °C to +70 °C
Water ingress rating	IP65 (NEMA 4X)

## PRODUCT FEATURES:

- 50 W continuous power handling
- Gain over 5 dBi (1805 to 1990 MHz)
- Self-contained balanced antenna, no groundplane required
- Spring-mounted whip ideal for man-pack applications
- Omni-directional H-plane (azimuth) pattern
- Waterproof to IP65

## APPLICATIONS:

- Radio controlled improvised explosive device (RCIED) signals
- Convoy protection

## PRODUCT DESCRIPTION:

The OMNI-A0075 is a tri-band omni-directional GSM antenna that has been designed for transmitters used to suppress radio-controlled improvised explosive devices (RCIEDs) signals and convoy protection. This antenna incorporates a spring which allows it to bend up to 70 degrees as the wearer moves through doorways or under obstacles.

The OMNI-A0075 has an omni-directional azimuth pattern with a low level of ripple to ensure all-round protection and an elevation pattern that shows no pattern break-up. This antenna is rated for 50 W indefinite continuous duty power handling.

The OMNI-A0075 is lightweight yet immensely durable and is ideally suited to challenging conditions be it on a man portable device or a vehicle mountable device.

**Similar products:** OMNI-A0134 is an extended version to reduce radiation hazard exposure. Total length increases to 710 mm.

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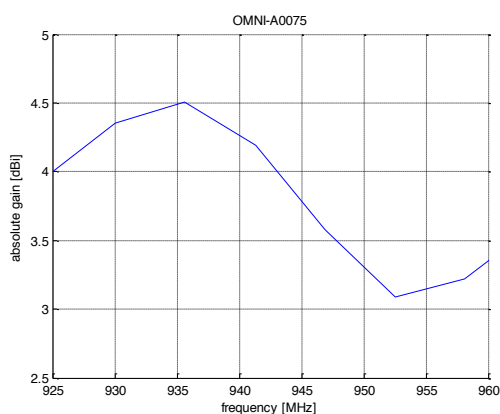
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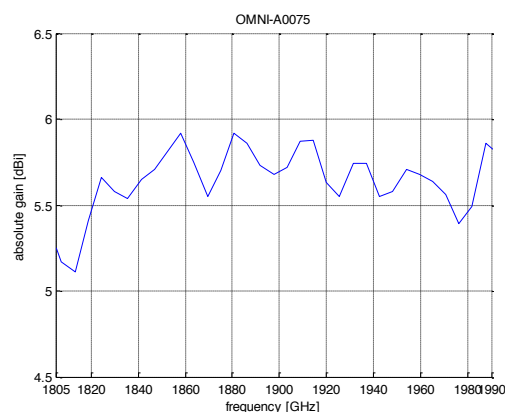
## VSWR AND GAIN GRAPHS:

### GAIN (dBi in free space):

#### GSM 900

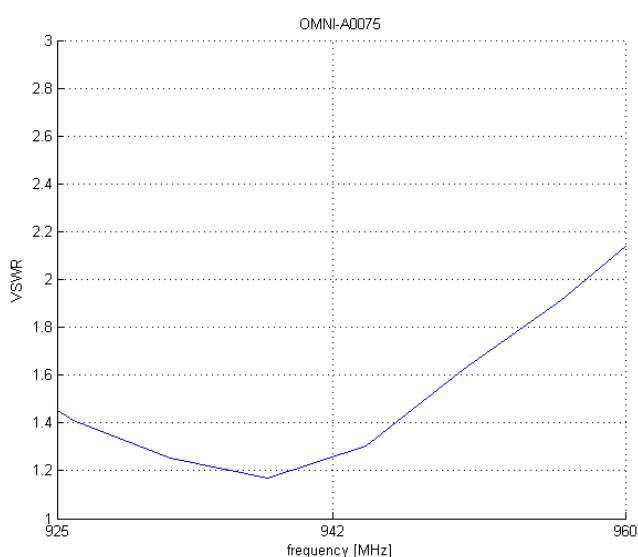


#### GSM 1800/1900



### VSWR:

#### GSM 900



#### GSM 1800/1900

