

# Tri-Band GSM Antenna

VERSION: 4.4

GSM 900 (925 – 960 MHz)  
GSM 1800 (1805 – 1880 MHz)  
GSM 1900 (1930 -1990 MHz)  
Product Code: OMNI-A0090



## 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 $\Omega$
Connector	N-type female
Feed power handling	50 W
Gain (max)	5 dBi $\pm$ 0.5 dB (GSM 900) 6 dBi $\pm$ 0.5 dB (GSM 1800) 6 dBi $\pm$ 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>	
Dimensions (l x d)	650 mm x 135 mm
Weight	750 g
Mounting method	NATO flange 4 and 6 holes
<b>Environmental: designed to meet the following specifications</b>	
Wind survival	160 km/h
Temperature (operational)	- 31 °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 ground plane required
- Spring-mounted whip
- Omni-directional H-plane (azimuth) pattern

## APPLICATIONS:

- RCIED signal suppression
- VIP protection
- Convoy protection

## PRODUCT DESCRIPTION:

The OMNI-A0090 is a tri-band omni-directional GSM antenna that has been designed to be used in high-powered transmit applications to suppress signals in applications like convoy protection and for RCIED. The design of this antenna allows it to bend up to 70°.

The OMNI-A0090 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.

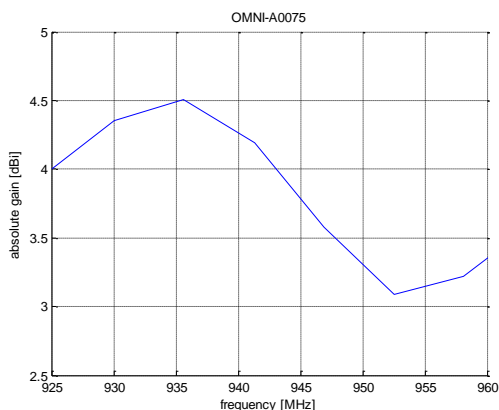
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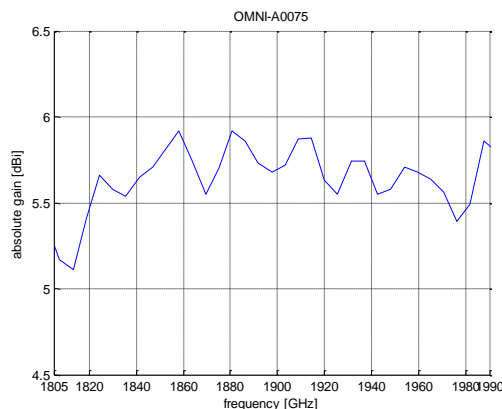
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## GAIN (dBi in free space):

### GSM 900:

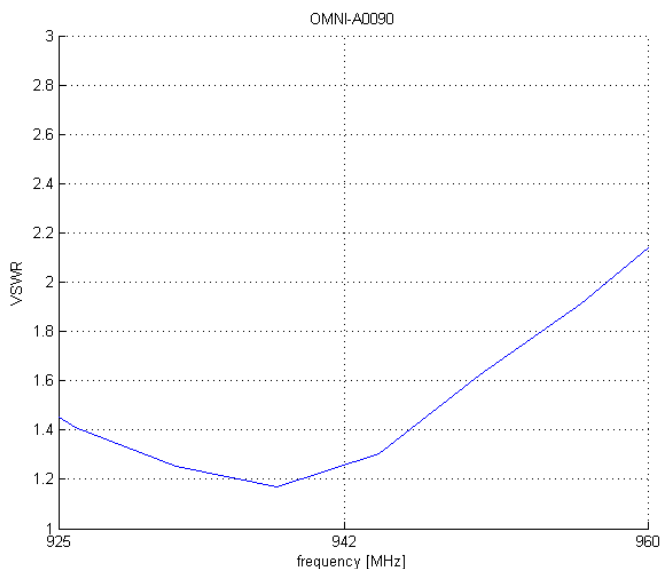


### GSM 1800/1900:

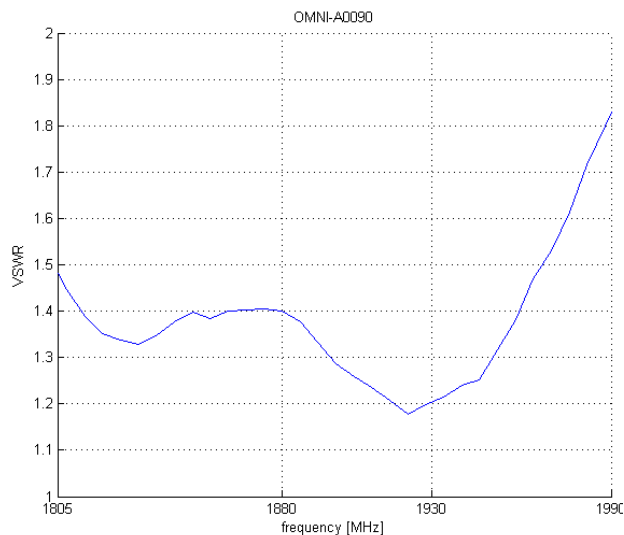


## VSWR:

### GSM 900:



### GSM 1800/1900:



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