

Alpha 7

Combined 2G/GPRS & GPS Puck Antenna



Key Features

- 30dB pre-amplifier
- High grade mounting adhesive
- Improves signal to noise ratio for mobile applications

General Description

The Alpha 7 is a compact, puck-shaped GSM & GPS combination antenna. This antenna combines two separate antennas into a single package.

The Alpha 7 is well suited to most 2G & GPS systems that require an 'all-in-one' antenna solution. Supplied with an adhesive base, the Alpha 7 is perfect for quick and simple installations onto a number of different surface materials.

The Alpha 7 is built with two separate antennas inside: a dual band GSM antenna and a GPS antenna. The GSM antenna is a 900/1800MHz dipole providing GSM and GPRS coverage throughout Europe, Africa and most of Asia. The GPS antenna is built with a 30dB Low Noise Amplifier (LNA) to provide strong satellite fixing in most circumstances where the antenna has full view of the sky.

Additional Considerations

- 3M™ adhesive pad ensures long lasting bond to windscreen
- Works on all UK and European GSM / GPRS cellular networks
- Meets all EU compliance criteria for electronic goods

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Electrical Specifications Dielectric Antenna

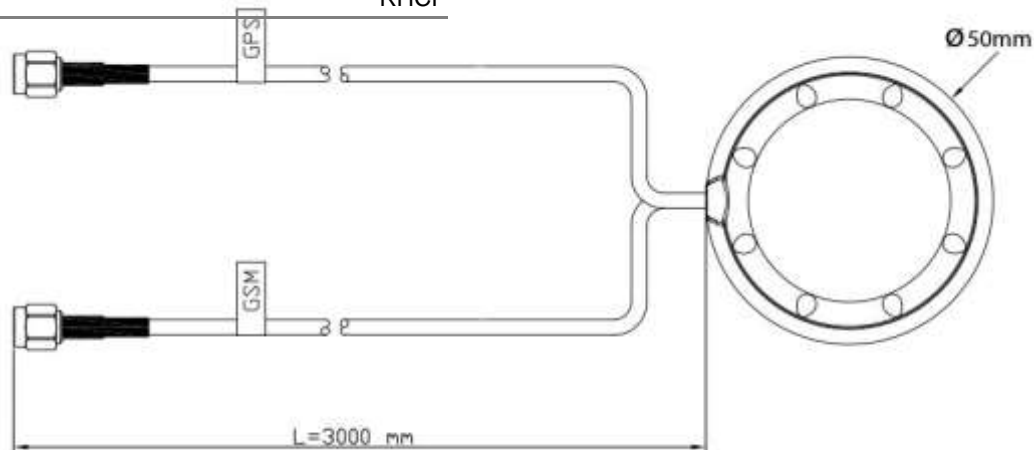
Frequency range:	900/1800MHz
Impedance:	50 Ohm
Peak Gain:	2dBi
Polarization:	Vertical
VSWR:	<2.0
Connector:	SMA Male

Mechanical Specifications

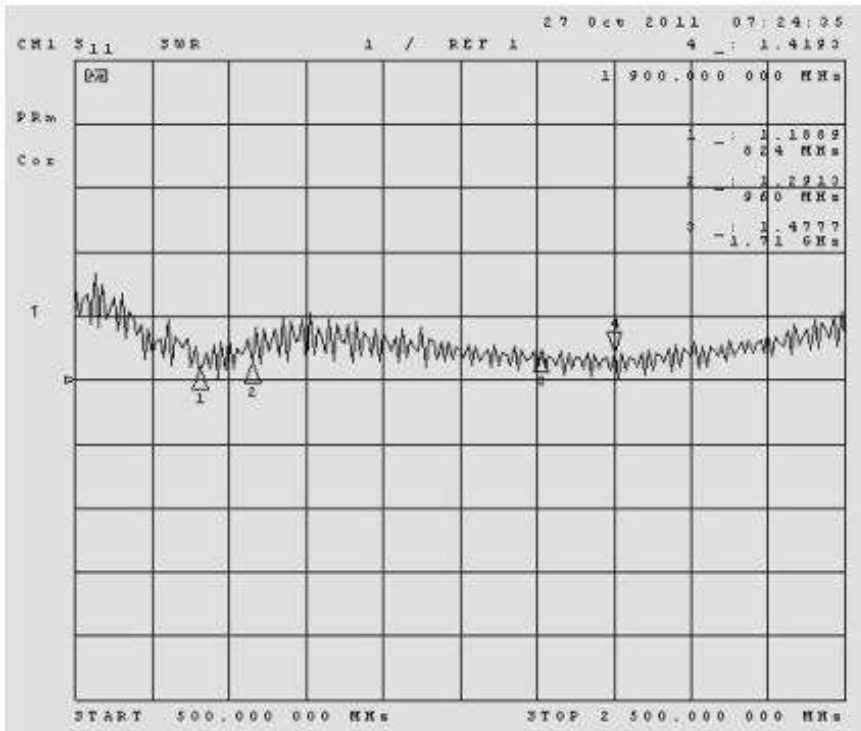
Dimensions:	L50 x H15.5mm Ø
Operating Temperature:	-40 - +90°C
Storage Temperature:	-40 - +90°C
GSM Connector:	SMA Male
GPS Connector:	SMA Male
Cable:	RG174
Relative Humidity:	10% - 90%

GPA Antenna

Frequency Range:	1575.42 +/- 1.023MHz
LNA Gain:	30dB
Impedance:	50 Ohm
Noise:	1.5dB Max
VSWR:	2.0 Max
Polarization:	RHCP

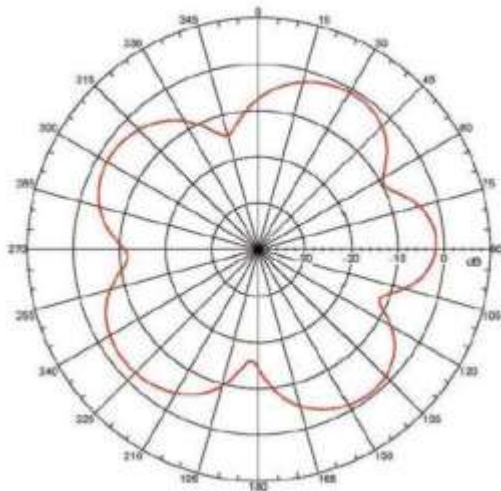


VSWR

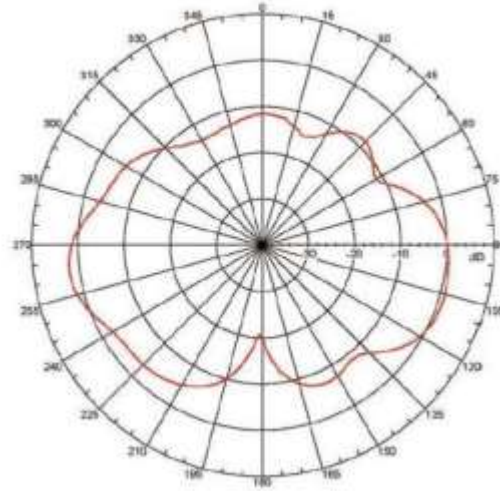


Radiation Plots

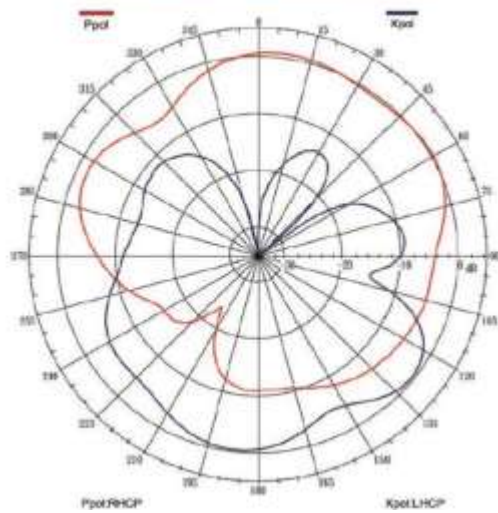
GSM Far-field amplitude at 900 MHz



GSM Far-field amplitude at 1800 MHz



GPS Radiation Pattern(without LNA)



Ordering Details

Part Number	Description
ALPHA7/3M/SMAM/SMAM/S/S/11	COMBINED 2G/GPRS & GPS PUCK ANTENNA 3M SMA MALE(GSM) SMA MALE (GPS)
ALPHA7/3M/FMEF/SMAM/S/S/11	GPS/GSM ANTENNA 3M CABLE FMEF (GSM) SMAM (GPS)
ALPHA7/4m/FMEF/SMAM/S/S/11	GPS/GSM 26DB GAIN ANTENNA 4M CABLE (GSM) FME FEMALE (GPS) SMA M