



Alpha 22

Combo 2G/3G/4G WiFi & GPS Adhesive Puck Antenna



Key Features

- 2G/3G/4G, WiFi and GPS Antenna
- Low profile design
- Adhesive Base
- Galileo - GPS - GLONASS Coverage
- Bluetooth and ZIGBEE Compatible

General Description

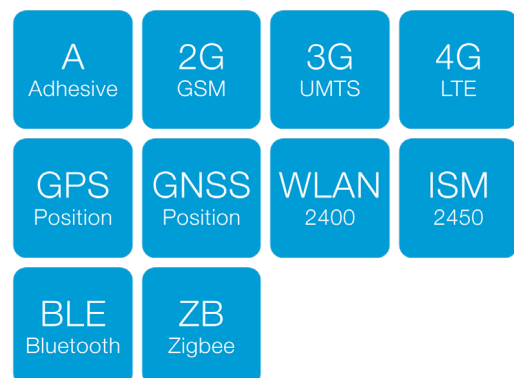
The Alpha 22 combines 3 separate antennas into one compact and low profile package, capable of 2G/3G/4G, WiFi & Global Positioning. Designed for users who want an 'all-in-one' solution rather than having to install three separate antennas.

The Alpha 22 is very compact solution for mobile vehicle interiors, in-building applications close to perimeter windows or protected exterior environments.

The Alpha 22 GPS antenna has a wide upper frequency band to cover the Galileo, GPS and GLONASS satellite positioning systems.

Additional Considerations

- Combination design saves on cost and installation of additional antennas
- Meets all EU compliance criteria for electronic goods





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Electrical Specifications Cellular Antenna

Frequency Range:	698 - 960MHz/1710-2700 MHz
VSWR:	≤3.0
Peak Gain:	2dBi
Polarization:	Linear
Impedance:	50 Ohm

GPS Dielectric Antenna

Center Frequency:	1561 - 1602 MHz
VSWR:	<1.5
Gain:	5dBic
Polarization:	RHCP
Impedance:	50 Ohm

GPS LNA

Gain:	28dB
Noise figure:	<1.5
Filter out band attenuation:	12dB min f0+50MHz ± 1dB 16dB min f0-50MHz ± 1dB
Supply voltage:	2.2 ~ 5V DC
DC current:	5 ~ 15mA
VSWR:	<2.0

Mechanical Specifications

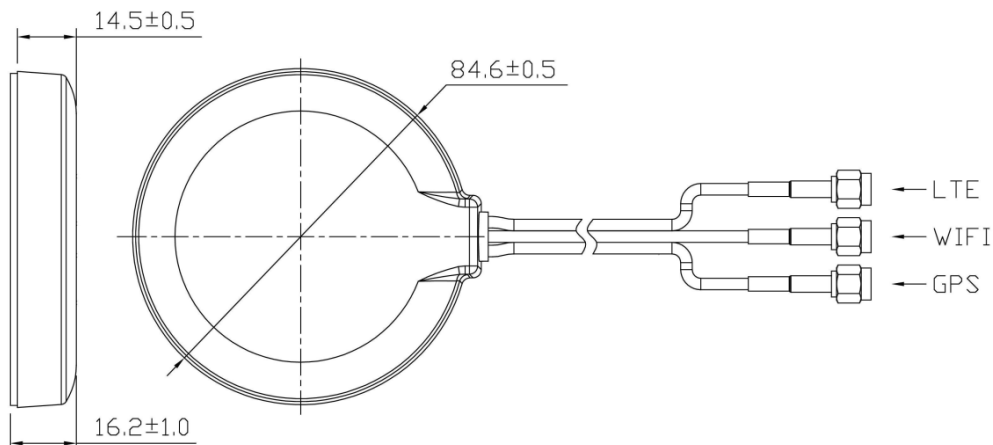
Dimensions:	L84 Ø x H16mm
Cable:	RG174
Connector:	2x SMA Male 1x SMA Male Reverse Polarity
Mounting:	M12 Screw
Maximum Material Thickness:	6.5mm

Environmental Specifications

Operating temperature range:	-40 - +85°C
Relative Humidity:	-Up to 95%

WiFi Antenna Specifications

Frequency:	2400 ~ 2483.5MHz
VSWR:	≤2.0
Gain:	3dBi
Impedance:	50 Ohm
Polarization:	Linear

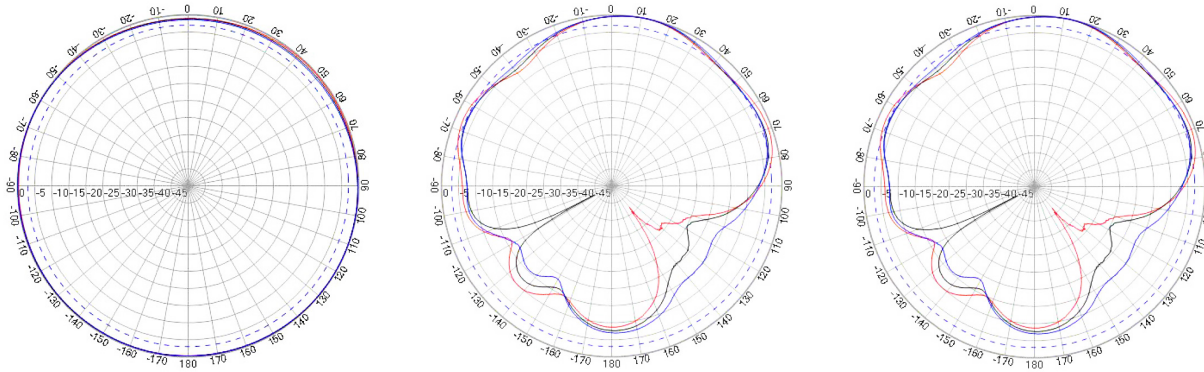




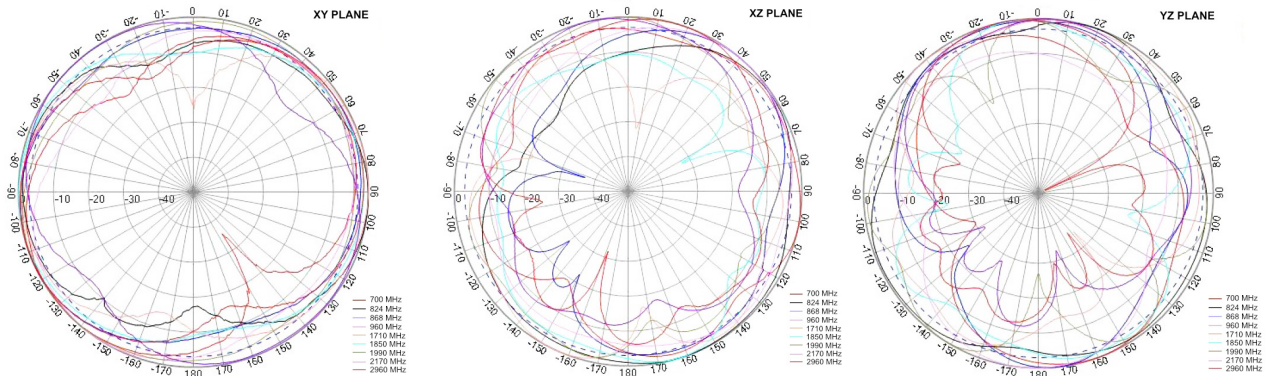
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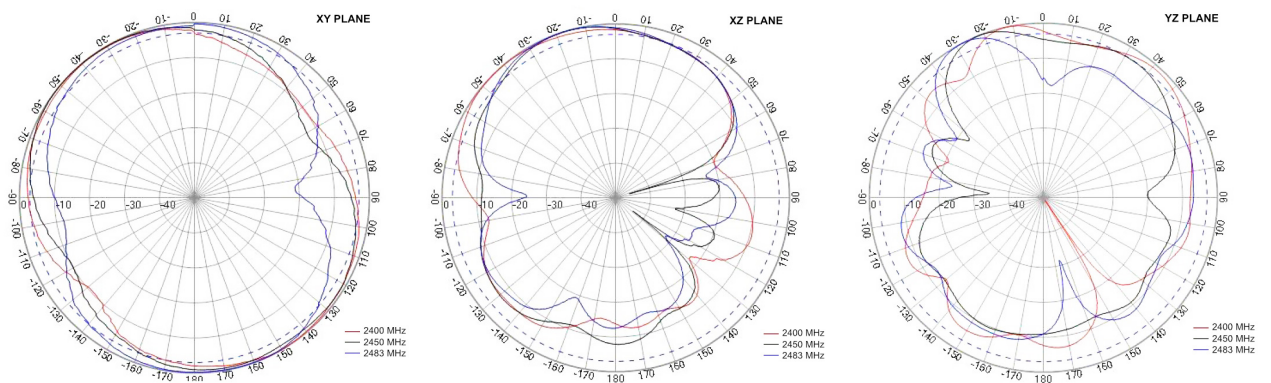
GPS Antenna



Cellular Antenna



WiFi Antenna





Enabling Industrial IoT

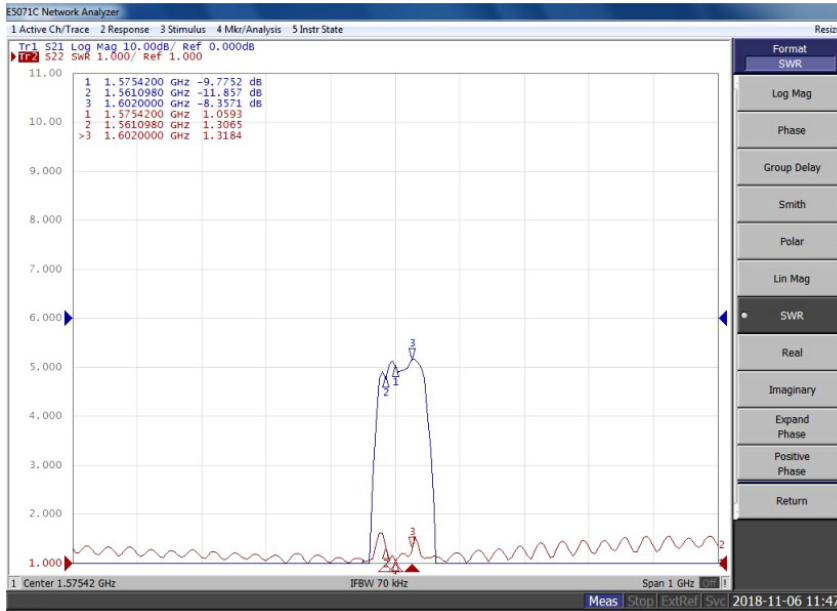


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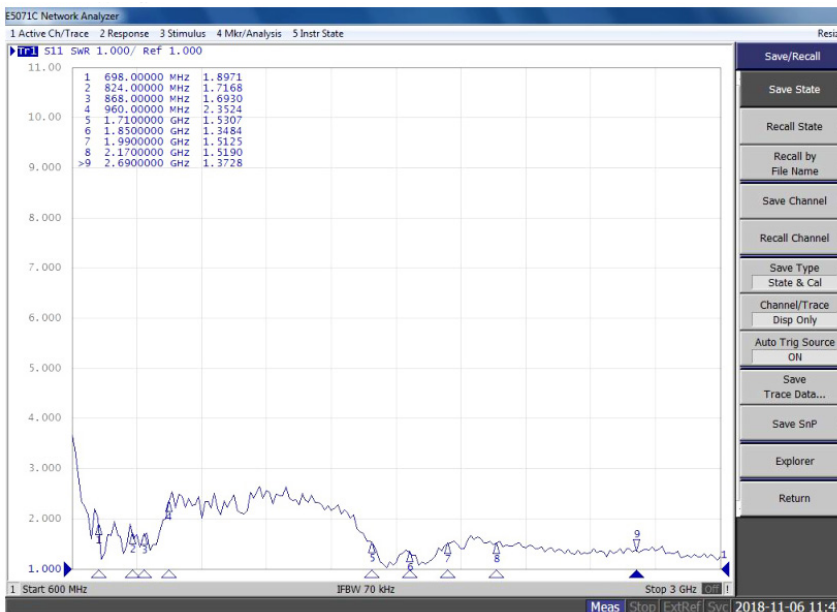
GPS VSWR/RL

based on 3M SMA



Cellular VSWR

based on 3M SMA



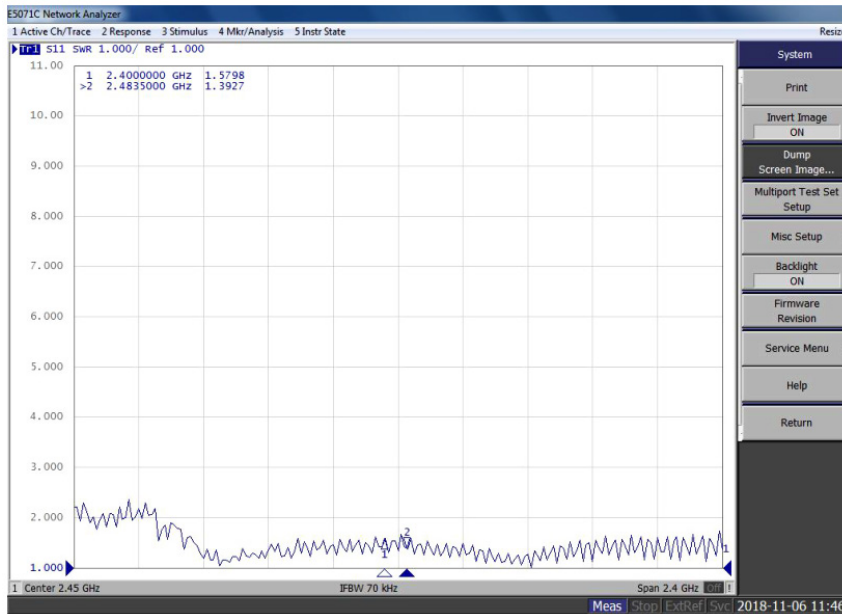


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WiFi VSWR

based on 3M SMA



Ordering Details

Part Number	Description
ALPHA22/3M/SMAM/SMAM/SMAM/S/S/26	Combo 2G/3G/4G WiFi & GPS Puck Antenna 3M SMA Male Connectors