



### Key Features

- Compact size: 35 x 6mm
- Flexible connector and cable options
- Quad band GSM and 3G
- ISM: 868 and 915MHz
- Ground plane independent
- RoHS compliant

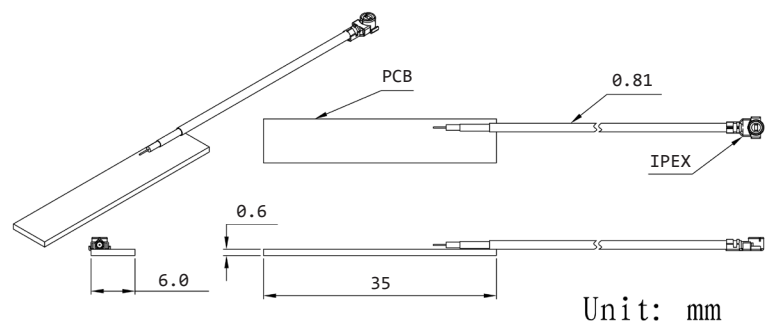
### General Description

Siretta multi purpose PCB antennas are based on an efficiently tuned PCB Element that is matched and embedded to work with a wide variety of RF & M2M modules operating on quad band GSM, 3G and ISM frequencies.

Proven in many embedded applications, it is groundplane independent and compact making it a popular choice where a small size is important. Its wide ranging connector and cable options makes it a convenient antenna for a quick design in whilst the miniature design allows it to fix to the inside of an enclosure or side of PCB.

### Additional Considerations

- 35mm x 6mm allows easy integration into small devices
- Allows easy selection and quick integration into target application
- Works with quad band GSM / GPRS devices, 3G and ISM
- Can be mounted on a wide range of surfaces or to float inside equipment
- Meets all EU compliance criteria for electronic goods.



Rev 1.5

### Key Specifications - Electrical

Temperature range:	-40 to +85°C
Impedance:	50 ohm
VSWR:	<2.0
Operating frequency:	824 ~ 960MHz 1710 ~ 2170MHz
Polarization:	Linear
Radiating element:	¼ wave dipole

### Key Specifications - Mechanical

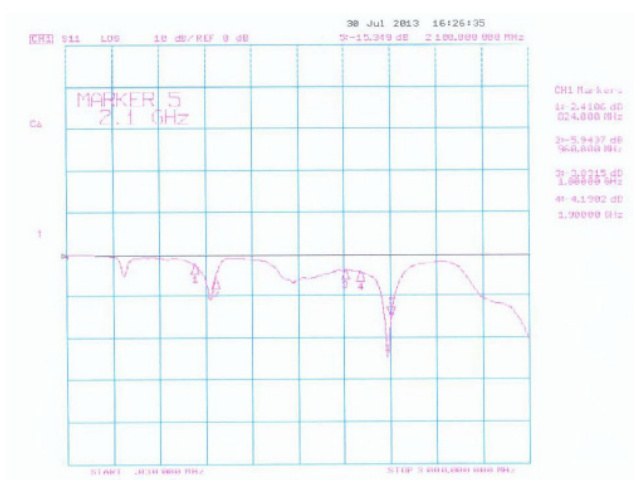
Dimensions:	35 x 6 x 0.6mm (without cable)
Cable:	100 - 150mm (RF 1.13mm)
Connector:	IPEX, GSC
Mounting method:	Adhesive
RoHS Compliant:	Yes

### Gain

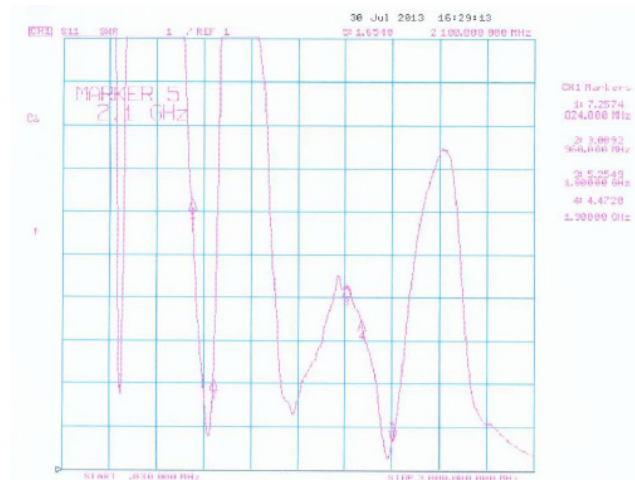
ISM	
868MHz:	-0.4dBi
915MHz:	-0.8dBi
GSM	
850MHz:	-1.95dBi
900MHz:	-0.92dBi
1800MHz:	0.78dBi
1900MHz:	1.13dBi
3G	
2100MHz:	3.66dBi

### Test Results

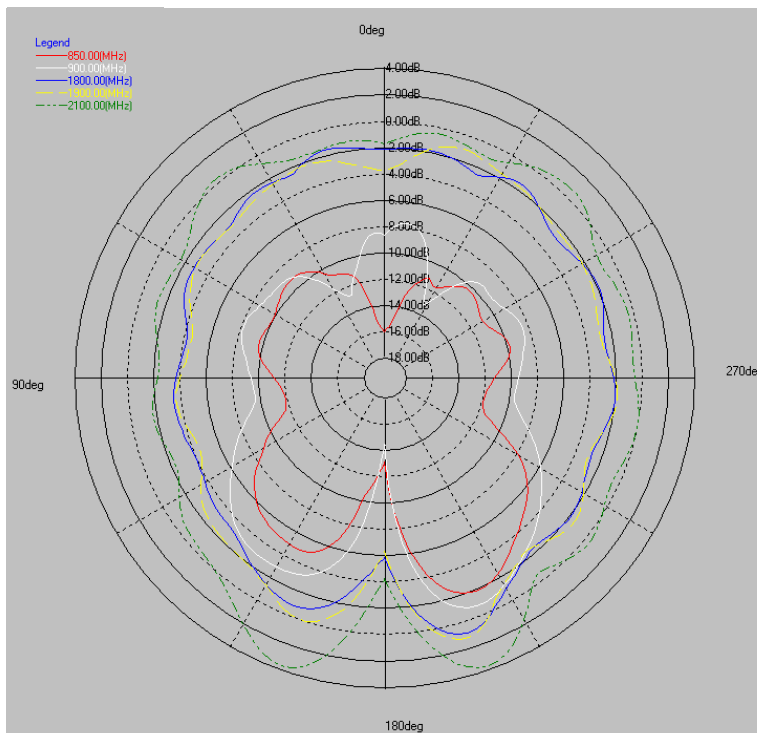
VSWR Graph



SWR Graph



## Gain vs. Frequency Graph



**UL Tested (Basingstoke, UK)**  
Part: ECHO 1A

## Ordering Details

Part Number	Description
ECHO1A/0.1M/IPEX/S/S/11	Quad Band GSM, 3G and ISM PCB Antenna, 100mm Cable, IPEX Connector
ECHO1A/0.2M/IPEX/S/S/11	Quad Band GSM, 3G and ISM PCB Antenna, 200mm Cable, IPEX Connector
ECHO1A/0.1M/GSC/S/S/11	Quad Band GSM, 3G and ISM PCB Antenna, 100mm Cable, GSC Connector
ECHO1A/0.2M/GSC/S/S/11	Quad Band GSM, 3G and ISM PCB Antenna, 200mm Cable, GSC Connector

Other cables length and connector styles available on request.