



## Echo 14

2G, 3G, 4G & ISM PCB Embedded Antenna



### Key Features

- Groundplane independent
- Wide frequency range
- Excellent gain within upper frequency band

### General Description

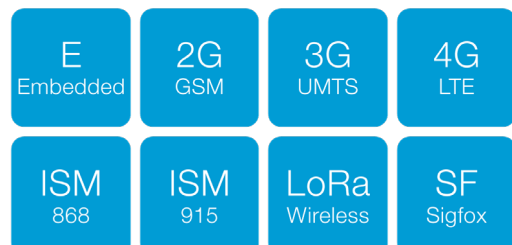
The Echo 14 is a multipurpose PCB embedded antenna with a wide operating frequency band which makes it suitable for a host of wireless IoT applications.

The antenna exhibits its best gains at the higher frequency spectrum of 1900MHz to 2600MHz.

It has compatibility with worldwide cellular applications over the quad band GSM/GPRS networks and also high data transfer rates via 3G UMTS and 4G LTE.

### Additional Considerations

- Can be mounted on any surface
- Meets all EU compliance criteria for electronic goods
- Supports Band 42





## Echo 14

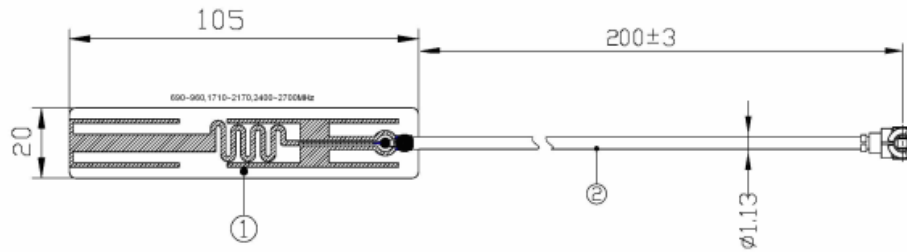
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### Electrical Specifications

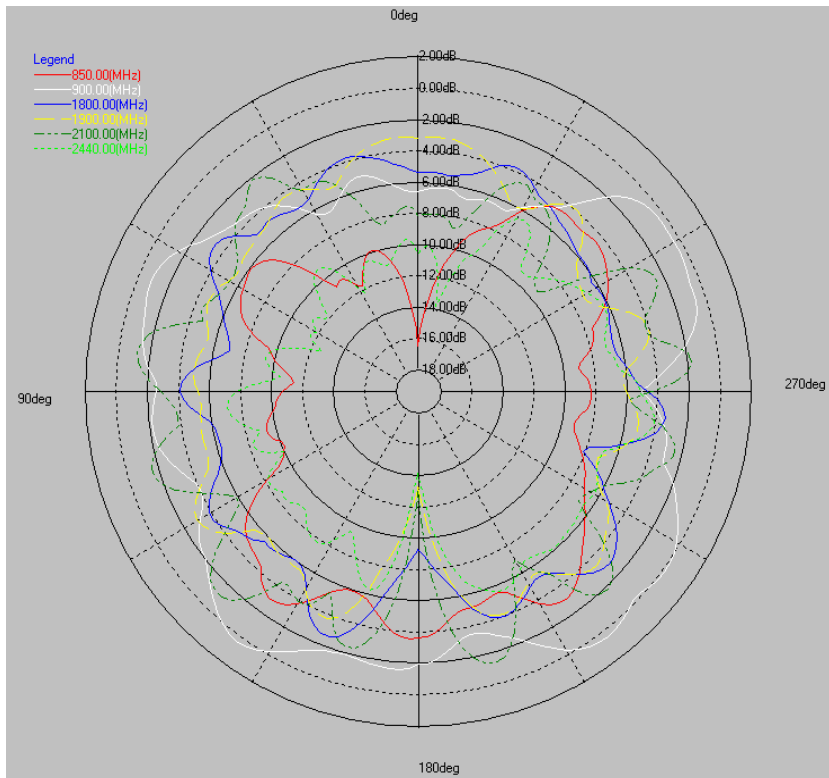
Frequencies:	800/900/1800/1900/ 2100-2500MHz 2500-2700MHz 3300-3600MHz
Impedance:	50 Ohm
VSWR:	<1.8:1
Polarization:	Vertical

### Mechanical Specifications

Dimensions:	L105 x W20 x H1mm
Operating Temperature:	-30 - +60°C
Storage Temperature:	-40 - +80°C
Cable:	1.13mm Coax
Connector:	IPEX



### Radiation Plots



### Gain

#### 2G

850MHz:	1.44dBi
900MHz:	0.72dBi
1800MHz:	1.73dBi
1900MHz:	2.79dBi

#### 3G

2100MHz:	2.84dBi
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#### 4G

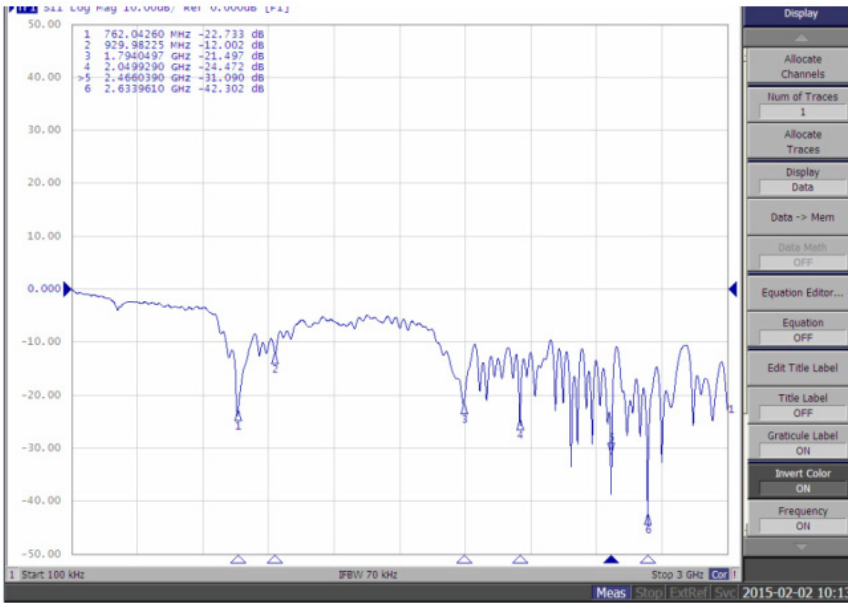
2600MHz:	2.44dBi
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### Return Loss



BAND 42 SUPPORT		
Frequency	Return Loss	VSWR
3419MHz	-9.09dB	2.08dB
3454MHz	-19.04dB	1.25dB
3494MHz	-19.29dB	1.24dB
3451MHz	-34.63dB	1.03dB
3600MHz	-15.90dB	1.38dB

### VSWR



### Ordering Details:

Part Number	Description
ECHO14/0.1M/UFL/S/S/15	2G/3G/4G & ISM PCB Antenna 100mm cable UFL/IPEX Connector
ECHO14/0.2M/UFL/S/S/15	2G/3G/4G & ISM PCB Antenna 200mm cable UFL/IPEX Connector