

PL510PCB

PL510RPCB

(DATASHEET)

Type
Frequencies

LTE Antenna
AMPS (824-894 MHz)
GSM (900 MHz)
DCS (1800 MHz)
PCS (1900 MHz)
3G (UMTS 2.1 GHz)
WIFI / BLUETOOTH (2.4 GHz)
LTE (790-860/1710-2690 MHz)

Mounting
Revision

Glass mount
00

A handwritten signature in black ink, appearing to read "Tipul".

P. Tipul

A handwritten signature in black ink, appearing to read "D. Noble".

D. Noble



1. PRODUCT SELECTION

PL510PCB without diagnostic resistor
 PL510RPCB with diagnostic resistor

2. SPECIFICATION

2.1. Electrical Specifications

Frequencies	AMPS (824-894 MHz) GSM (900 MHz) DCS (1800 MHz) PCS (1900 MHz) 3G (UMTS 2.1 GHz) WIFI / BLUETOOTH (2.4 GHz) LTE (790-860/1710-2690 MHz)
Impedance	50 Ohms
Polarization	Horizontal
Gain	2.14dBi
VSWR	<2:1
Power handling	25W
Operating temperature	-40°C to +85°C

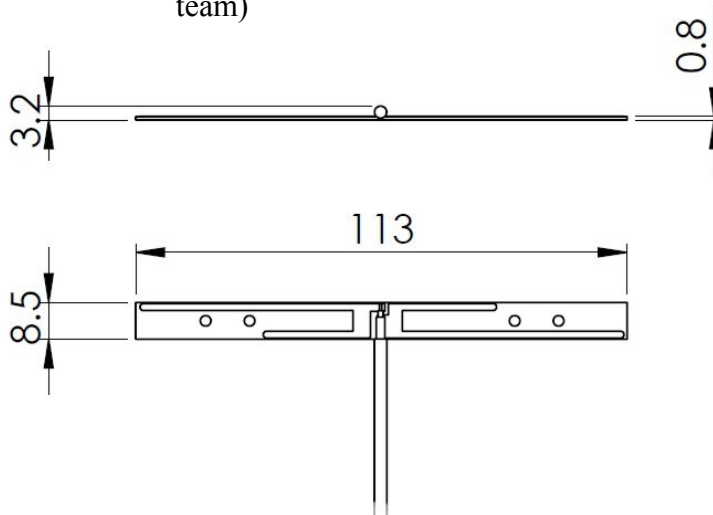
2.2. Connection Specifications

Connector type: SMA male
 Cable: RG174U
 Cable length: 30 cm

For different cable and connector type ask our sales team.

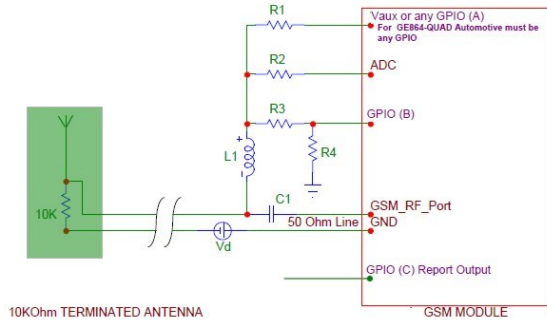
2.3. Mechanical Specifications and Dimensions

Material: FR4
 Max. dimensions: 3.2mm x 113mm x 8.5mm (H x L x W)
 Weight: 13 g ‘weight with 250cm cable length and SMA connector’
 Colour: Black or White(for different colours please ask our sales team)



3. ANTENNA CONNECTION

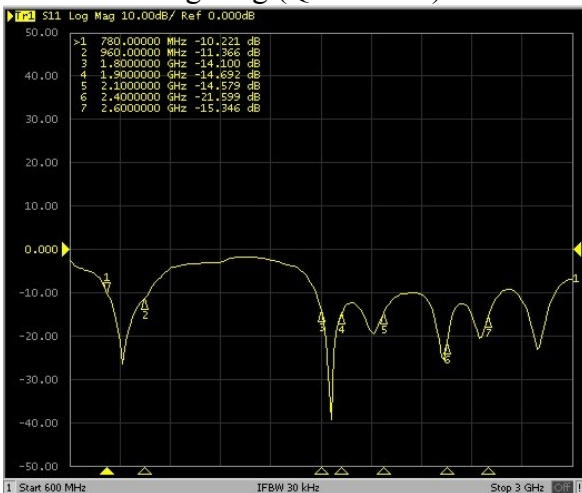
Antenna PL2510PCB isterminated with10kOhmresistor what canbe used inapplication where youneed checkifantenna is connected, or ifthere isopen circuit. Onthe picture belowyoucansee example ofconnectingantenna into that circuit.



4. MEASUREMENT

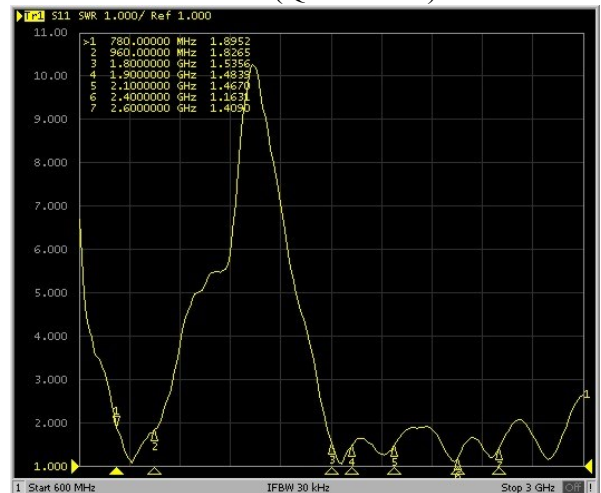
4.1. S11

Log Mag (Quad Band)



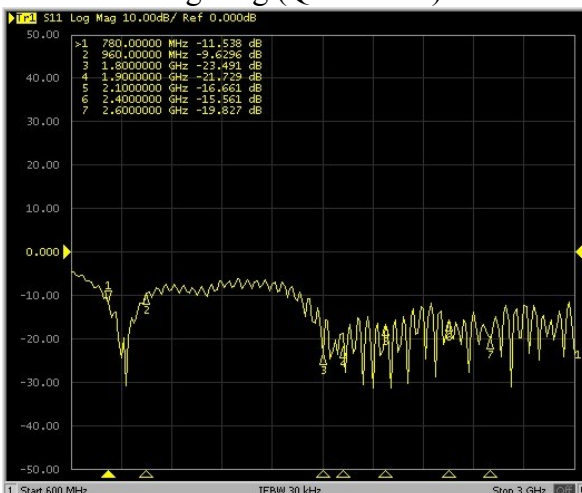
Tested with 30cm cable length and 6mm thin glass.

VSWR (Quad Band)



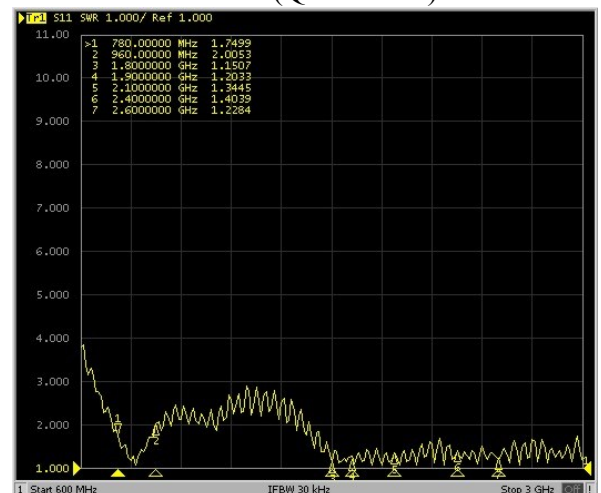
Tested with 30cm cable length and 6mm thin glass.

Log Mag (Quad Band)



Tested with 250cm cable length and 6mm thin glass.

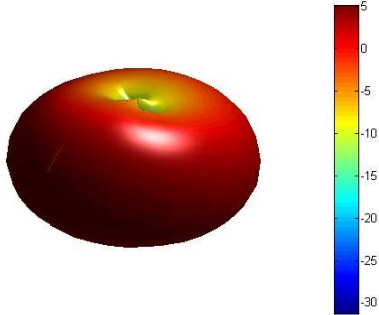
VSWR (Quad Band)



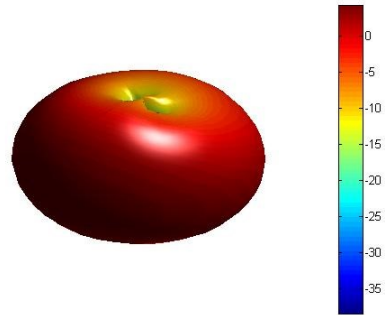
Tested with 250cm cable length and 6mm thin glass.

4.2. 3D radiation pattern

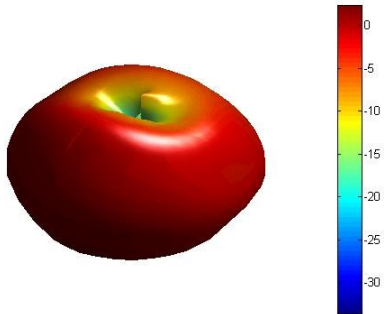
Freq = 0.8500GHz Az= 45 EL= 45



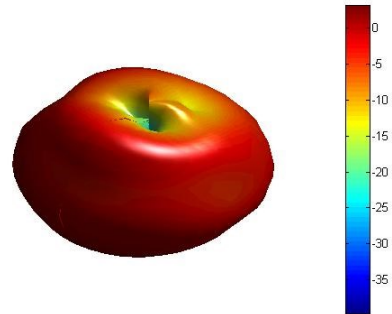
Freq = 0.9GHz Az= 45 EL= 45



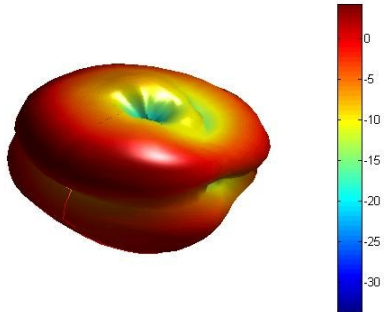
Freq = 1.8GHz Az= 45 EL= 45



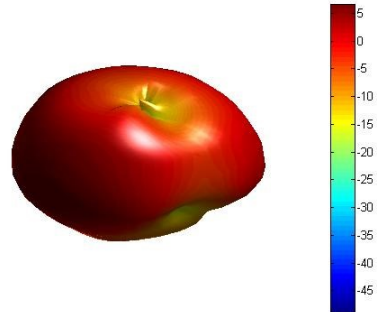
Freq = 1.9GHz Az= 45 EL= 45



Freq = 2.1GHz Az= 45 EL= 45



Freq = 2.4GHz Az= 45 EL= 45



Freq = 2.6GHz Az= 45 EL= 45

