



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





**FXP14.11.0100B**

## Specification

<b>Part No.</b>	<b>FXP14.11.0100B</b>
<b>Product Name</b>	<b>FXP14 Hexa-Band Cellular Antenna</b> 850/900/1700/1800/1900/2100MHz
<b>Feature</b>	Murata GSC Connector 100 mm 0.81 Coaxial Cable 70*20*0.1 mm RoHS Compliant

## 1. Introduction

The Taoglas FXP14 Hexa Band Cellular Antenna covers all world-wide bands (850 / 900 / 1700 / 1800 / 1900 / 2100 MHz). These cellular bands are used for different technologies in different countries such

as GSM / CDMA / DCS / PCS / WCDMA / UMTS/ HSPA / GPRS / EDGE / 3G. The antenna has been designed in a flexible material with a rectangular form-factor and cable connection for

an easy installation. The antenna works on different plastic materials and thickness. We have selected a piece of ABS with 2mm of thickness as a baseline for testing.

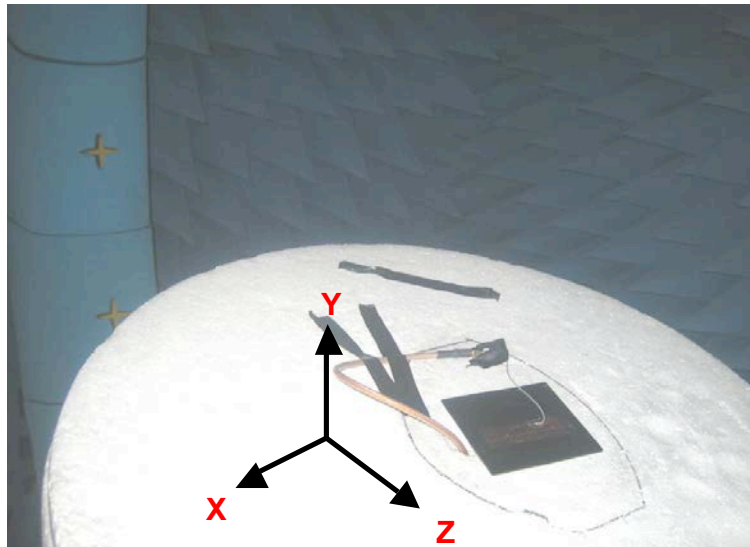
## 2. Specifications

Parameter	Hexa Band Cellular Antenna					
Cellular Band (MHz)	850	900	1700	1800	1900	2100
Return Loss (dB)	-7	-12	-8	-9	-9	-8
Efficiency (%)	52	55	60	60	62	65
Gain (dBi)	2	1.5	3	2.5	2	2.5
Impedance	50 Ohms					
VSWR	≤2.5:1					
Polarization	Linear					
Power Handled	5W					
Operation Temperature	-40 °C ~ +85 °C					
Storage Temperature	-40 °C ~ +85 °C					
Dimensions	70 X 20 X 0.1 mm					
Weight	1.5 g					
Connector	Murata GSC					
Cable Standard	Mini-Coax 0.81 mm					
Cable Length and color	100 mm, Black					
RoHS Compliant	Yes					
Adhesive	3M 467					



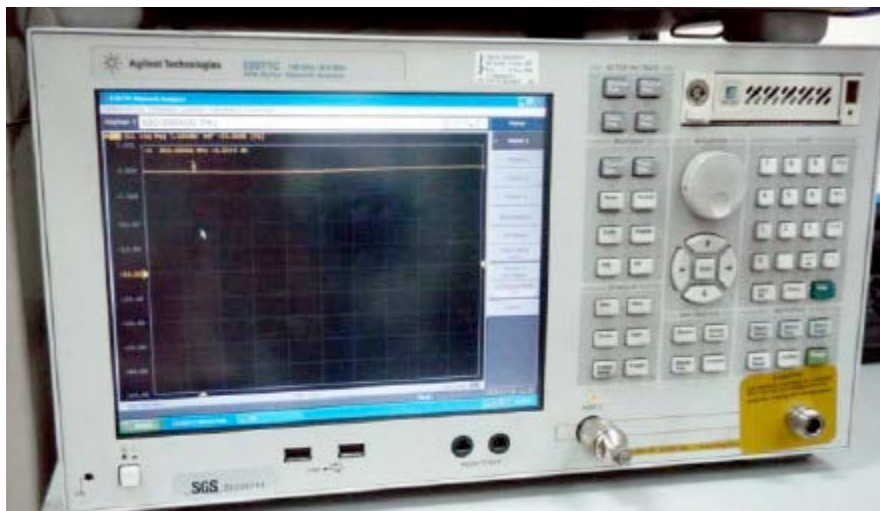
### 3. Test Set Up

A Satimo SG24 3D Scan System with Anechoic Chamber



**Figure 1.** Satimo System.

Agilent 5071C Vector Network Analyzer



**Figure 2.** Network Analyzer.

## 4. Antenna Parameters

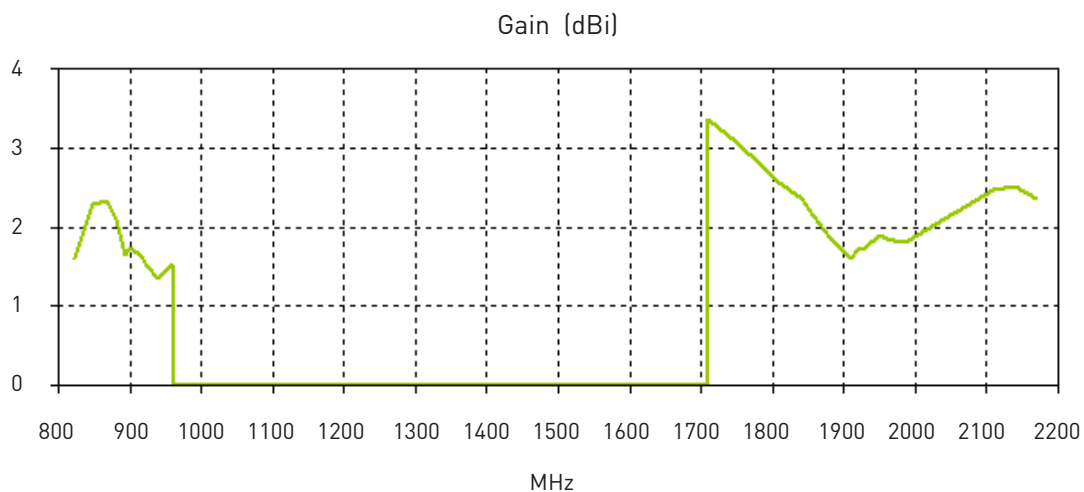
The next antenna parameter graphs like Return Loss were measured in the Agilent 5071C Vector Network Analyzer. The Gain, Efficiency and Radiation Patterns were measured in the reliable Satimo 3D Scan System.

### 4.1 Return Loss Data



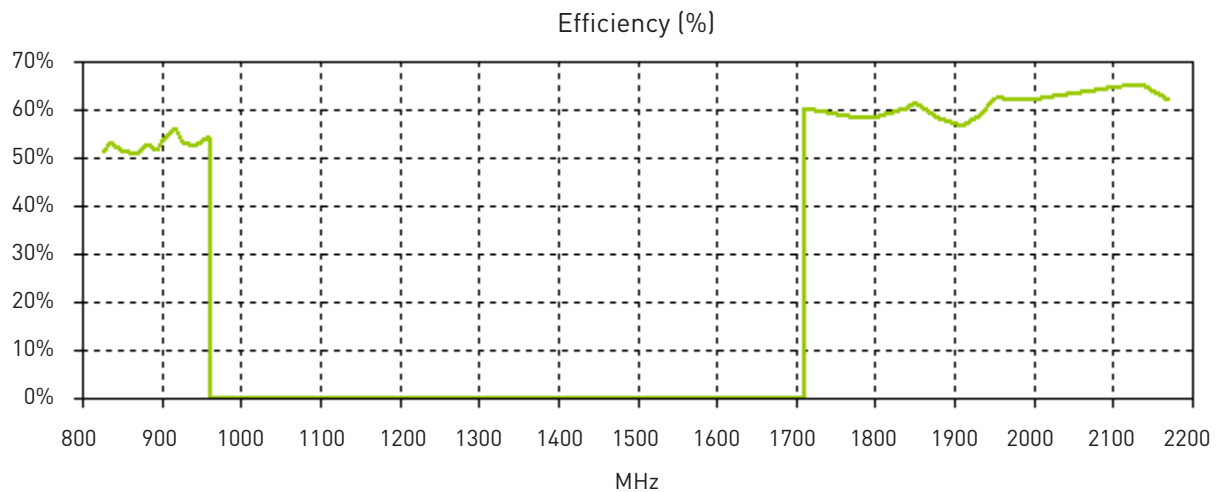
**Figure 3.** Return Loss for the FXP14 Antenna.

### 4.2 Gain Data



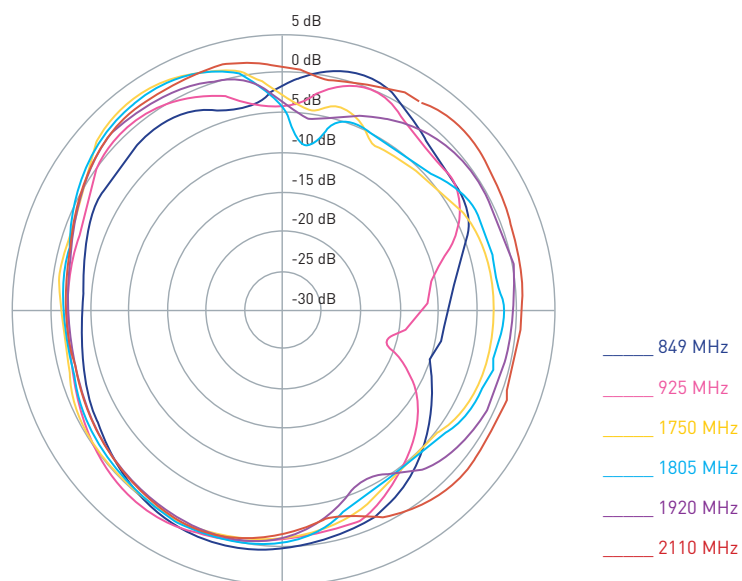
**Figure 4.** Gain for the FXP14 Antenna.

### 4.3 Efficiency Data

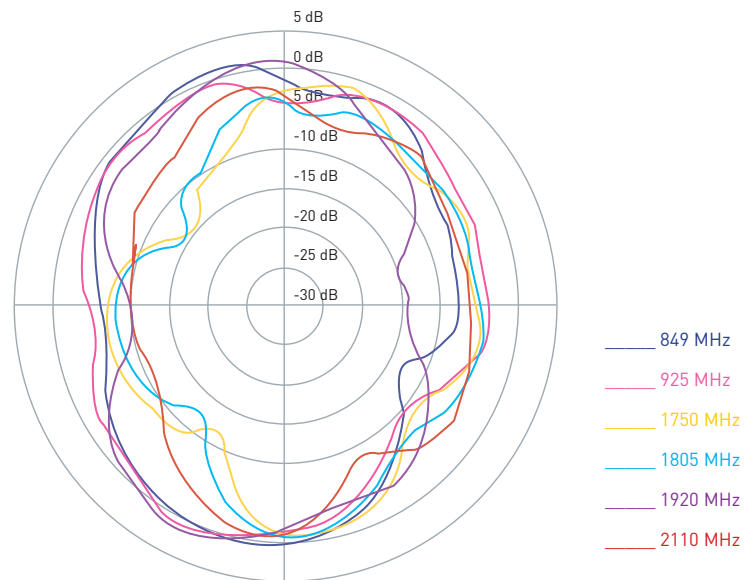


**Figure 5.** Efficiency for the FXP14 Antenna.

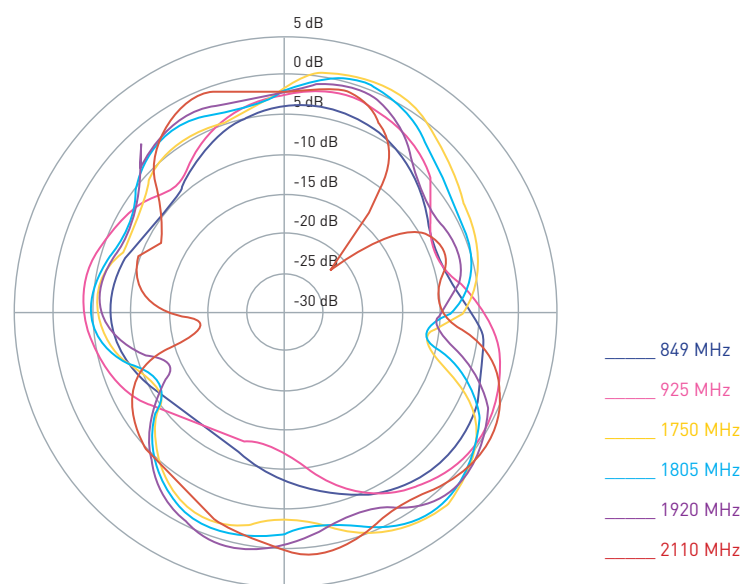
### 4.4 Radiation Pattern Data



**Figure 6.** Radiation pattern XZ Plane, Figure 1 as reference (dB)

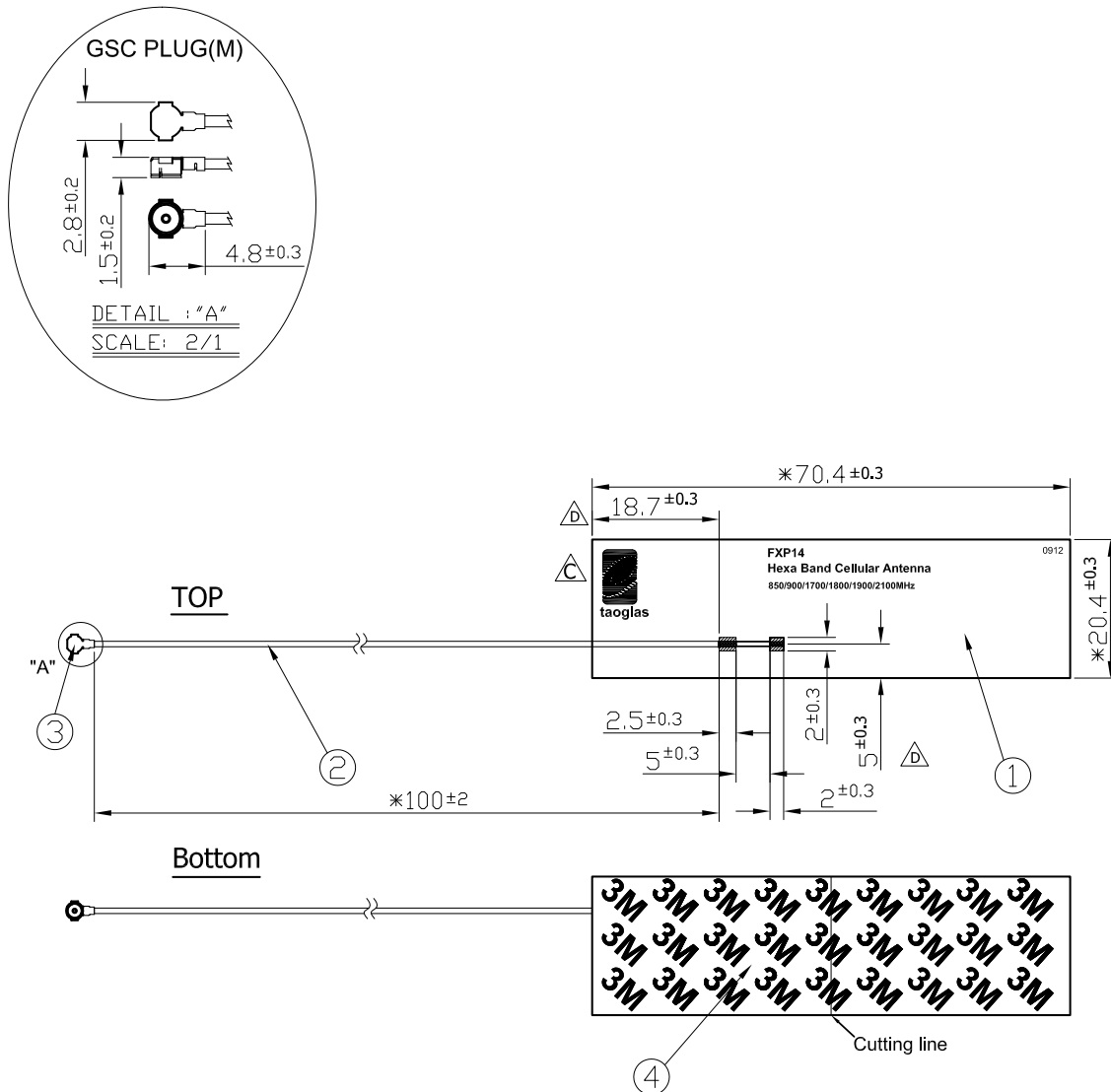


**Figure 7.** Radiation pattern YZ Plane, Figure 1 as reference (dB)



**Figure 8.** Radiation pattern XY plane, Figure 1 as reference (dB)

## 5. Drawing



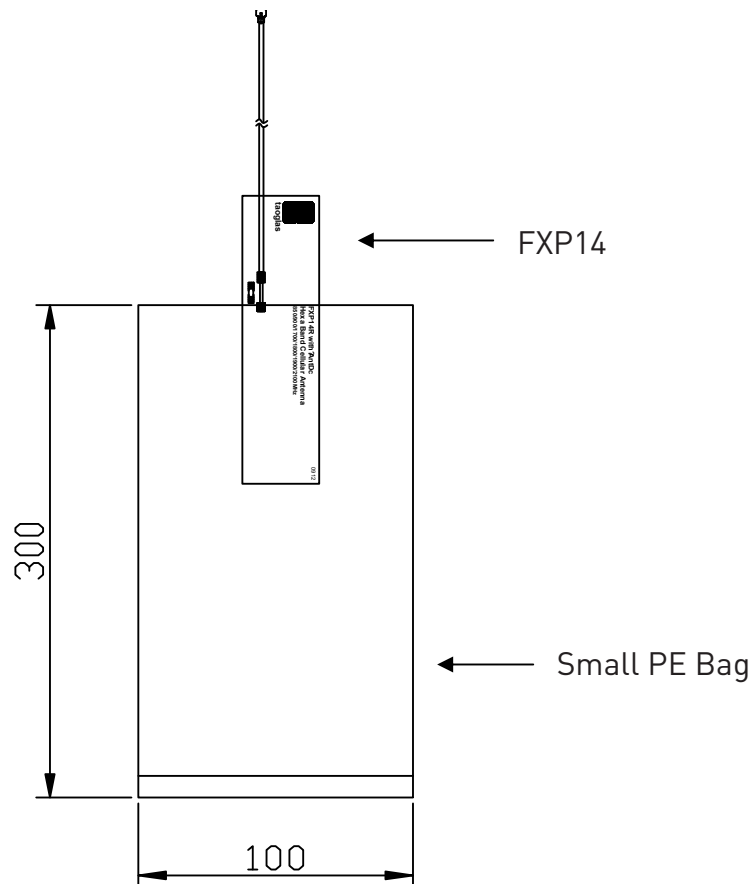
**Figure 9.** Mechanical Drawing for the FXP14 Antenna

	Name	Material	Finish	QTY
1	FXP14 PCB	FPCB 0.1t	Black	1
2	Ø0.81 Coaxial Cable	FEP	White	1
3	GSC Plug(M)	Brass	Silver	1
4	Double-Sided Adhesive	3M 467	Brown Liner	1



## 6. Packaging

100pcs antenna per small PE bag



Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and

product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein.

Reproduction, use or disclosure to third parties without express permission is strictly prohibited.  
Copyright © Taoglas Ltd.