

SPECIFICATION

FXP73 Blue Diamond 2.4GHz Band Antenna

Part No. : **FXP73.07.0100A**

Product Name : FXP73 Blue Diamond 2.4GHz

Multi Standard Antenna

Feature : 2.5dBi Gain

IPEX MHFI Connector (U.FL compatible)

100 mm Cable 47*7*0.1 mm RoHS Compliant





1. OVERVIEW

The FXP73 Blue Diamond 2.4GHz Antenna works on WiFi, ZigBee, Bluetooth and ISM band at 2.4 GHz. This antenna has been designed with a specific solution to cover the current market applications that require rectangular form-factor, with easy installation through a cable connection.

2. ANTENNA CHARACTERISTICS

Communication System	Bluetooth	Wi-Fi	Zigbee	2.4GHz ISM			
	2401-	2412 2462	2410-2480	2400 2492 E			
Efficiency	2480 2412-2462 2410-2480 2400-2483.5 50%						
Gain	2.5dBi						
Free Space Peak Gain	3.0dBi						
Return Loss	-10dB						
Impedance	50 Ohms						
VSWR	≤ 2:1						
Polarization	Linear						
Power Handled	5 W						
Operation Temperature	-40 °C ~ +85 °C						
Storage Temperature	-40 °C ~ +85 °C						
Dimensions	47*7*0.1 mm						
Weight	1.2 g						
Connector	MHFI (U.FL Compatible)						
Cable Standard	Mini-Coax 1.13 mm						
Cable Length and color	100mm, White						
RoHS Compliant	Yes						
Adhesive	3M 467						



3. TEST SET UP

A ETS 3D Scan System with Anechoic Chamber.

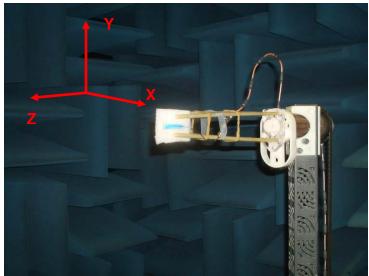


Figure 1. ETS System

Agilent 8753ES Vector Network Analyzer.



Figure 2. Network Analyzer



4. ANTENNA PARAMETERS

The next antenna parameter graphs like Return Loss, Smith Chart and VSWR were measured in the Agilent 8753ES Vector Network Analyzer. The Gain, Efficiency and Radiation Patterns were measured in the reliable ETS 3D Scan System.

4.1 Return Loss Data

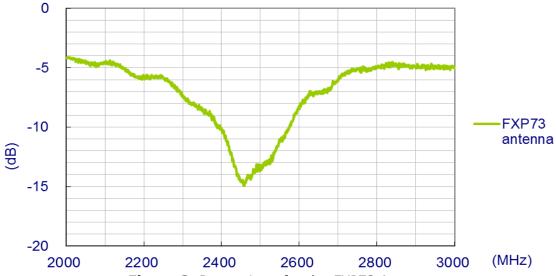


Figure 3. Return Loss for the FXP73 Antenna

4.2 Gain Data

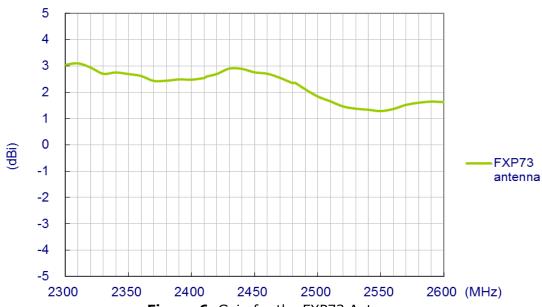
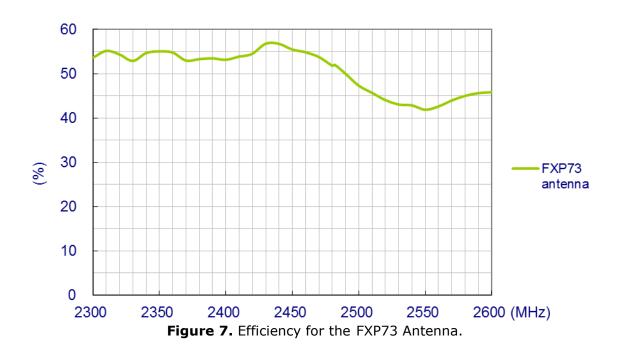


Figure 6. Gain for the FXP73 Antenna



4.3 Efficiency Data





4.4. Radiation Pattern Data

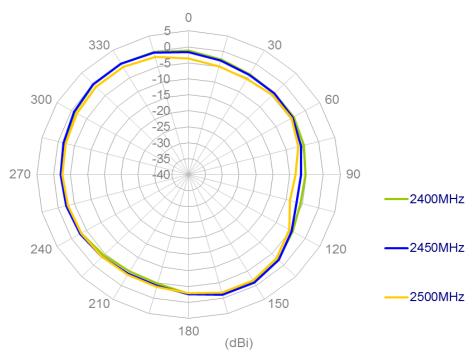


Figure 8. Radiation pattern XY Plane, Figure 1 as reference (dB)



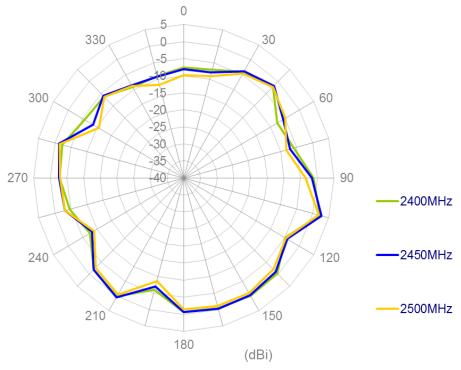


Figure 9. Radiation pattern XZ Plane, Figure 1 as reference (dB).

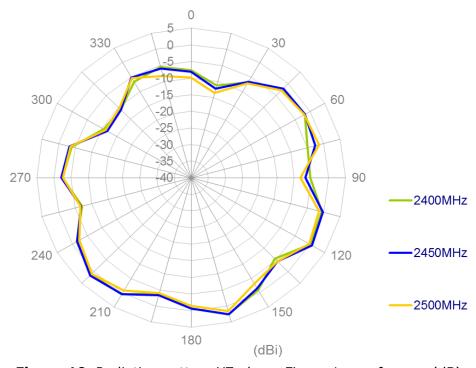
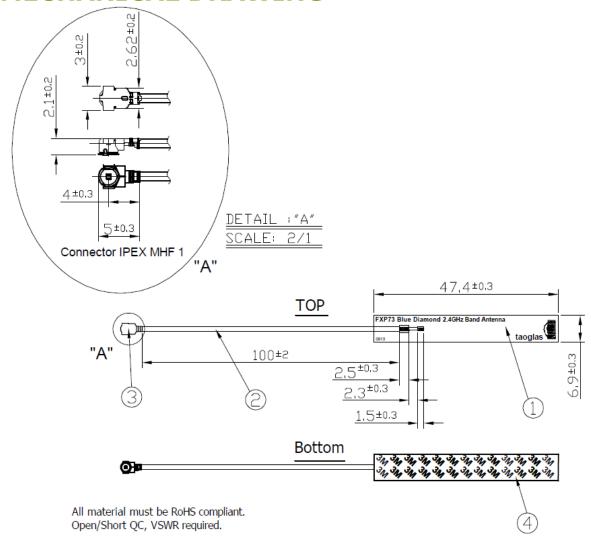


Figure 10. Radiation pattern YZ plane, Figure 1 as reference (dB).



5. MECHANICAL DRAWING



	Name	Part No.	Material	Finish	QTY
1	FXP73 PCB		FPCB 0.1t	Blue	1
2	1.13 Mini-Coaxial Cable		FEP	White	1
3	IPEX MHF1		Brass	Gold	1
4	Double-Sided Adhesive		3M 467	Brown Liner	1

Figure 11. Mechanical Drawing for the FXP73 Antenna