

I. Introduction

FXP.503 is a 3-in-1 MIMO antenna. The three identical 2.4/5GHz antenna elements on the FPCB can be separately be used as either transmit antenna or receive antenna. Having three antenna integrated in one FPCB can greatly reduce the antenna assembly time.

II. Antenna Specification

ELECTRICAL						
Band	2.4 ~ 2.5GHz			4.9 ~ 5.9GHz		
Antenna	Left	Center	Right	Left	Center	Right
Peak Gain (Free Space)	1.3dBi	0.8dBi	0.0dBi	7.2dBi	6.3dBi	4.9dBi
Peak Gain (ABS)	4.2dBi	1.6dBi	2.7dBi	7.5dBi	6.8dBi	7.3dBi
Average Gain (Free Space)	-5.3dBi	-6.0dBi	-6.2dBi	-3.2dBi	-3.2dBi	-5.0dBi
Average Gain (ABS)	-2.6dBi	-3.9dBi	-3.1dBi	-1.5dBi	-1.8dBi	-1.4dBi
Efficiency (Free Space)	31%	26%	24%	52%	50%	34%
Efficiency (ABS)	55%	41%	50%	71%	66%	73%
Polarization	Linear					
Impedance	50 ohms					
Max Input Power	10 watts					
VSWR	<2.5:1					
MECHANICAL						
Dimensions	61 x 41 mm					
Cable	70mm 1.37 co-axial					
Connector	IPEX MHFHT					
ENVIRONMENTAL						
Temperature Range	-40°C to +85°C					
Humidity	Non-condensing 65°C 95% RH					