

antenna specification

model : **PFP25-WG-210G**

manufacture

company name: Guangzhou Xaircraft Technology
CO., LTD

Address: Block C, No. 115, Gaopu Road, Tianhe
District, Guangzhou City, Guangdong, P. R.
510663 China

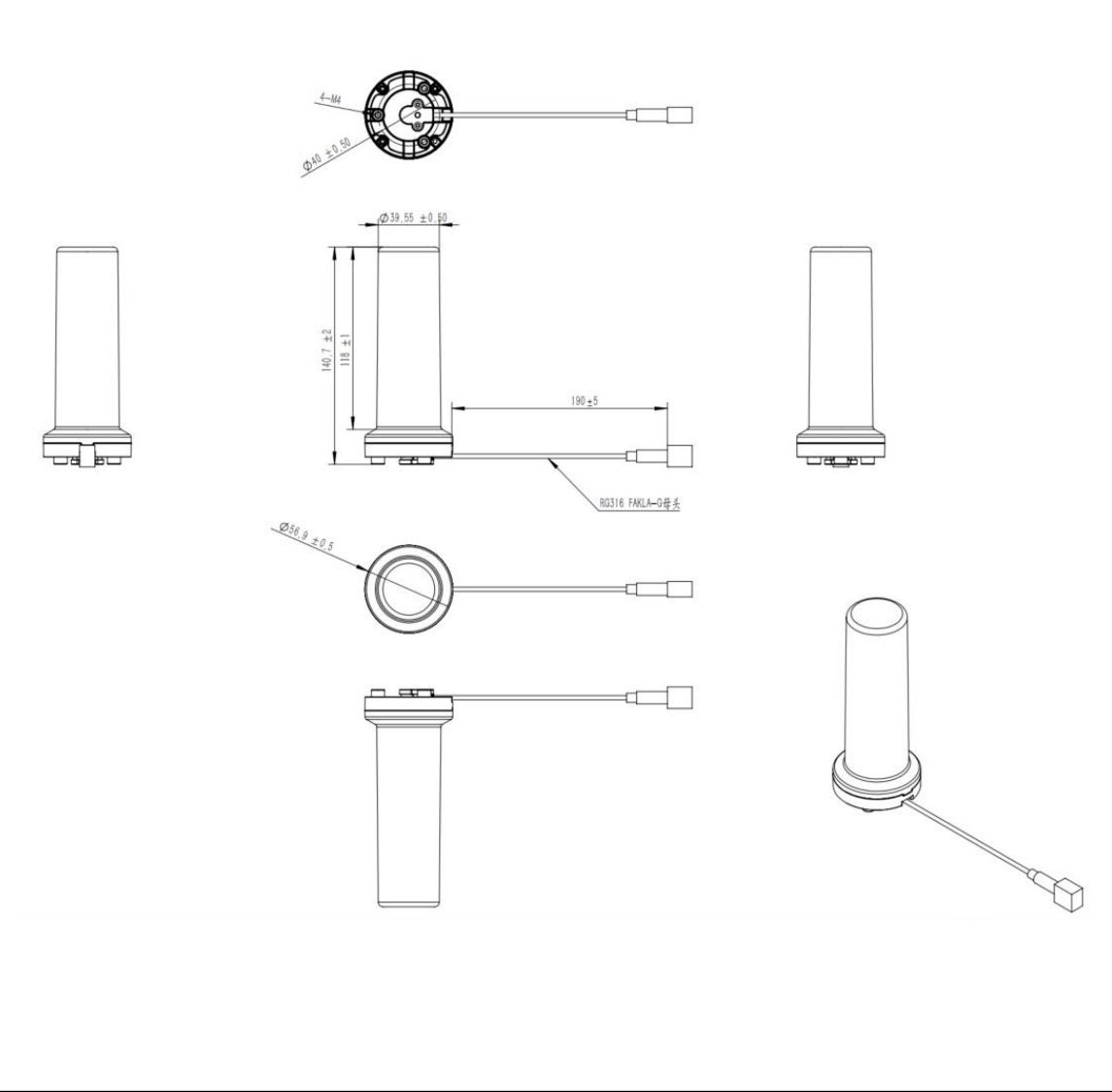
广州极飞科技股份有限公司

2025 年 6 月 9 日

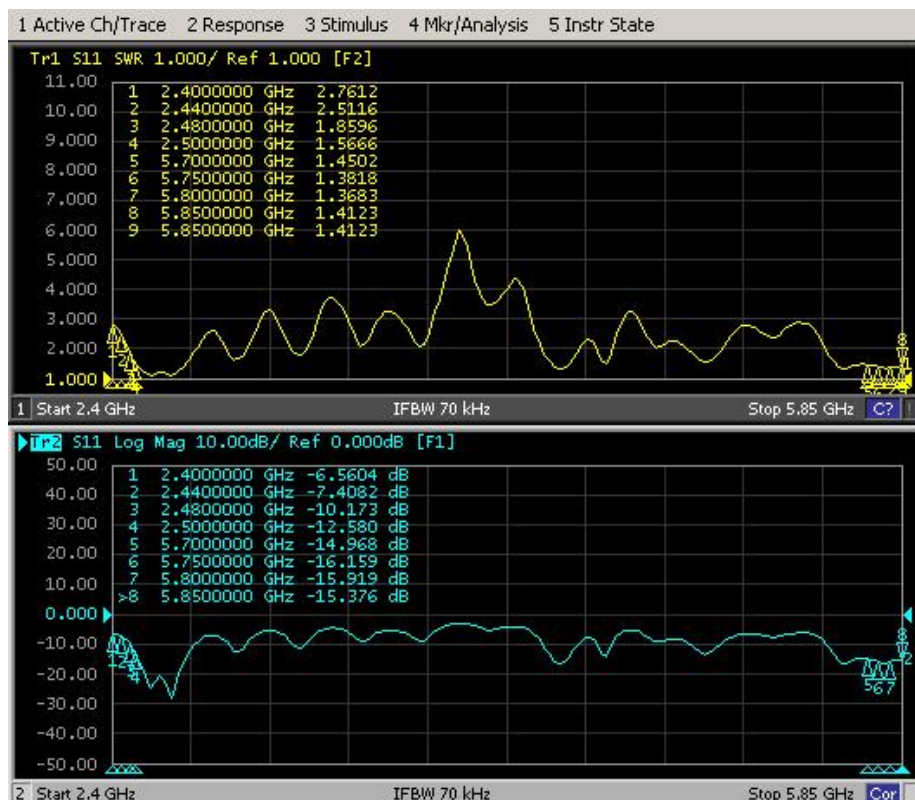
Drawner	Checker	Approver
Yao Xiangxi	Wang Keqiao	Deng Haibo

1. Specifications

1.1 GNSS Antenna		
Electrical Specifications		
Frequency(MHz)	GPS L1/L2/L5/L-band BDS B1I/B2I/B3I/B1C/B2a/B2b GLONASS L1/L2/L3 GALILEO E1/E5a/E5b/E6 QZSS L1/L2/L5/L6 IRNSS L5	
VSWR	≤2	
Polarization	RHCP	
Peak Gain(dBi)	2.5	
Axial Ratio(dB)	≤3	
Azimuth Coverage(°)	360	
Impedance(Ohm)	50	
LNA Specifications		
LNA Gain(dB)	21±2	
Noise Figure(dB)	≤2	
Passband Ripple(dB)	±2	
VSWR	≤2	
Operation Voltage(V)	+3.3~+6 DC	
Operation Current(mA)	≤20	
1.2 Bluetooth Antenna		
Electrical Specifications		
Frequency(MHz)	2400~2500	
VSWR	≤3	
Peak Gain(dBi)	0.8	
Efficiency	50%	
Polarization	Verical	
Impedance(Ohm)	50	
1.3 WIFI Antenna		
Electrical Specifications		
Frequency(MHz)	2400~2500	5700~5850
VSWR	≤3	≤2
Peak Gain(dBi)	0.8	5.19
Efficiency	50%	60%
Polarization	Verical	

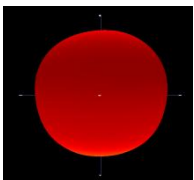
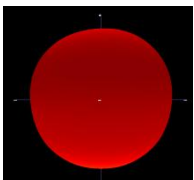
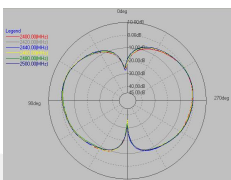
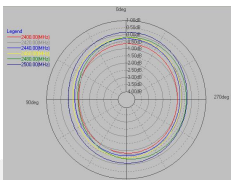
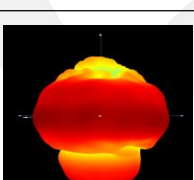
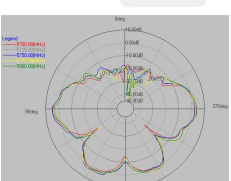
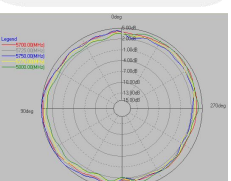
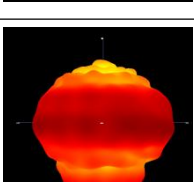
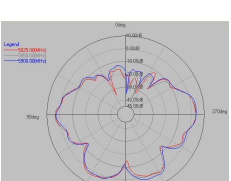
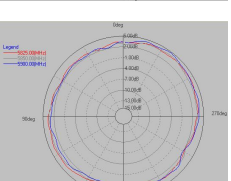
Impedance(Ohm)	50
2.Mechanical Specifications	
Connector Type	MCX(Male)
Antenna Dimension(mm×mm)	140.7×56.9×φ56.9
3.Environmental Specifications	
Storage Temperature	- 40℃ ~ +80℃
Operation Temperature	- 40℃ ~ +80℃
4.Test Condition and Procedure	
V.S.W.R	Set DUT on Network Analyzer,make individual calibration to test
Gain	Set DUT on Chamber,make individual calibration to test
5.Antenna Dimensions Diagram	
 The diagram illustrates the mechanical specifications of the antenna through multiple views. The top view shows a circular base with four mounting holes (4-M4) and a diameter of 56.9 ± 0.5 mm. The side view shows a rectangular profile with a total height of 140.7 ± 2 mm, a base diameter of 39.55 ± 0.50 mm, and a mounting bracket length of 190 ± 5 mm. The bottom view shows the internal structure and the RO316 FAKULA-Q connector. A perspective view shows the antenna's cylindrical shape and the connector cable.	

2. Bluetooth Antenna and WIFI Antenna S Parameter Test Data



3. Bluetooth Antenna and WIFI Antenna Radiation Parameter Test Data

Frequency ID	1	2	3	4	5	6	7	8
Frequency(MHz)	2400	2440	2480	2500	5700	5750	5800	5850
Gain(dBi)	0.55	0.71	0.69	0.8	5.06	5.19	4.69	4.29
Efficiency(%)	55.19	58.27	57.52	60.26	62.78	66.46	62.85	62.91

Frequency(MHz)	3D Pattern	Vertical Pattern	Horizontal Pattern
2400			
2440			
2500			
5700			
5800			
5850	