

2.4 GHz Antenna

Product Approval Datasheet

Customer		Frequency Band	2400 MHz – 5800 MHz
Cable Name	—	Version	A1
Customer P/N		Customer Model	
RF Design	Xiao Bin	RF Manager	Liu Liang
Mechanical Design	Wang Dong	Sales	Zhang Fuli
Technical Director	PUTER	Date	2026-09-23

Customer Confirmation: Does the assembly meet your requirements: ☐ OK ☐ NG

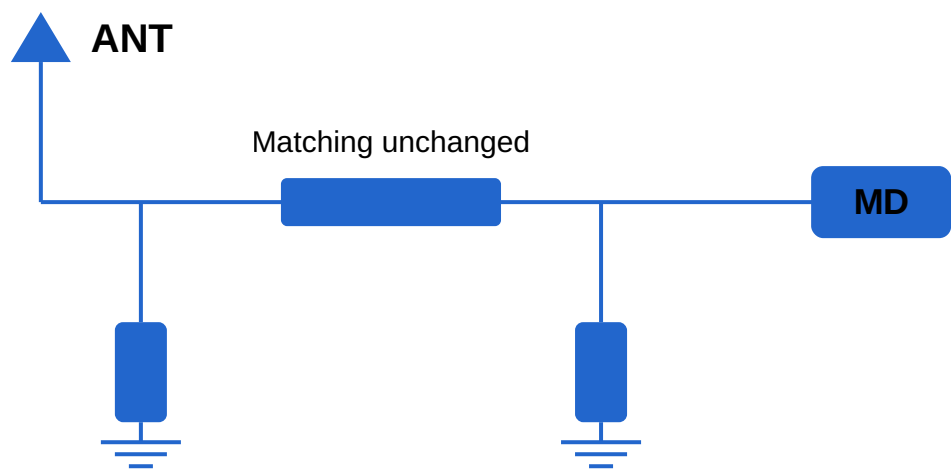


II. Product Parameters

Product Test Parameters			
Product Name	WiFi Dual-Band Antenna	Product Model	2.4GHz ANT
Electrical Specifications			
Frequency Range	2400 MHz – 2483.5MHz	Polarization	Vertical
Input Impedance	50 Ω	Radiation Pattern	Directional
VSWR	≤ 2.0	Power Rating	50 W

Gain	3 dBi	Bandwidth	100 MHz
Mechanical Specifications			
Dimensions		Antenna Color	Black
Connector Type	SMA-J (male)	Cable Length	
Antenna Material	ABS		
Operating Temperature	-40 °C ~ +85 °C	Storage Temperature	-40 °C ~ +85 °C

Antenna Matching Circuit (Original matching retained unchanged)

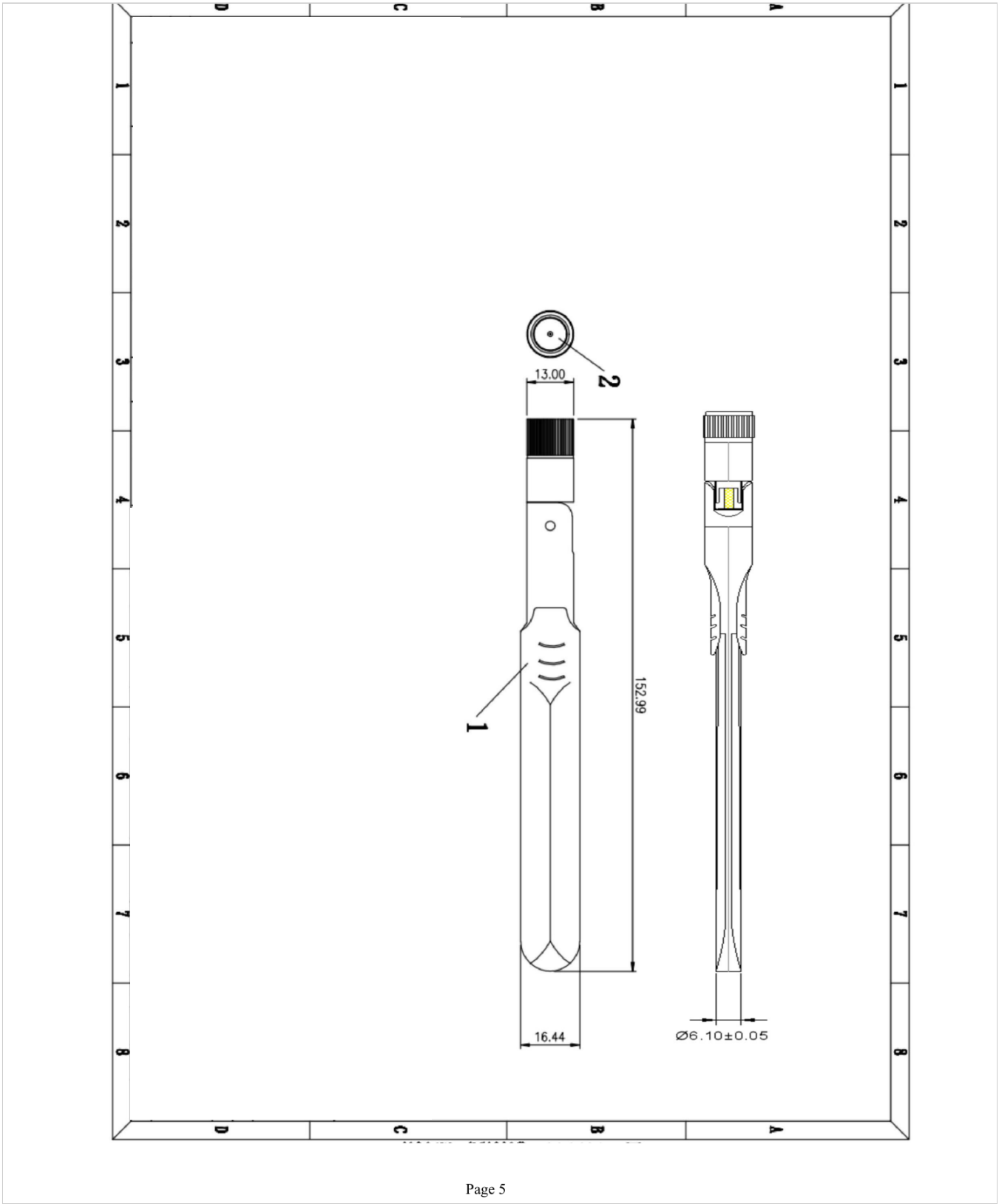


Manufacturer: Leetop Technology (Shenzhen) Co., Ltd.
Address: Unit 1706, Building A, Country Garden Phoenix Zhigu Building, No.50, Tiezai Road, Xixiang Street, Bao 'an District, Shenzhen

III. S11 (VSWR, Return Loss & Smith Chart) Data



Measured markers: **2.4 GHz** – Return Loss -10.2 dB, VSWR 1.89; **2.5 GHz** – Return Loss -15.2 dB, VSWR 1.42; **5.17 GHz** – Return Loss -17.3 dB, VSWR 1.32; **5.8 GHz** – Return Loss -24.6 dB, VSWR 1.13.



Technical Requirements:

1. Dimensions without tolerance shall comply with the "Unspecified Tolerance" table on the drawing.
2. Machining shall strictly follow the dimensions shown on this drawing.
3. Dimensions marked with * are critical dimensions.
4. Materials shall comply with "RoHS" environmental requirements.

Projection: Third-angle projection. **Scale:** 1:1 **Sheet:** 1 of 3

V. Environmental Performance Test

Item	Test Condition	Specification
Storage Environment	Unless otherwise specified, test under the following conditions: 1. Temperature: -30 °C ~ +80 °C 2. Relative humidity: 45 % ~ 85 % 3. Atmospheric pressure: 86 kPa ~ 106 kPa	Electrical and mechanical performance normal.
High / Low Temperature Test	5 cycles between +70 °C and -40 °C, then 12 h under normal conditions; inspect appearance quality.	Dimensions shall meet the drawing; mechanical and electrical performance shall be satisfied.
Constant Damp Heat Test	Relative humidity 95 ± 3 %, test temperature 40 °C. After 48 h, measure electrical performance within 5 min after removal; leave sample under normal conditions for 12 h, then inspect appearance quality.	Dimensions shall meet the drawing; mechanical and electrical performance shall be satisfied.
Vibration Test	Frequency range: 10 – 55 Hz; displacement amplitude: 0.35 mm; acceleration amplitude: 50.0 m/s ² ; number of sweep cycles: 30.	Electrical and mechanical performance normal.
Drop Test	Free fall from a height of 1 m, 3 times along mutually perpendicular axes.	Electrical and mechanical performance normal.

VI. 3D Radiation Patterns

Frequency / MHz	Efficiency / %	Max. Gain / dBi
2350	50.82	1.46
2400	46.67	0.79
2450	43.75	0.89
2500	51.29	2.24
2550	55.46	3.19

