



Shenzhen Shuodian Electronic Technology Co.,Ltd

Date:2023-10-07

Page number 1-10

Antenna Specifications

for

LOCK_PRO antenna

Woan Technology (Shenzhen) Co., Ltd.

Customer part number

Our company's part number

WA-LOCK_PRO pcb

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Date: 2023.10.07

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Shenzhen Shuodian Electronic Technology Co.,Ltd



catalogue

1. BOTH PARTIES CONFIRM	3
2. GENERAL MATTERS	4
2.1 SCOPE OF APPLICATION	4
THIS SPECIFICATION ONLY APPLIES TO WOAN TECHNOLOGY LOCK_ PRO ANTENNA	4
2.2 OPERATING TEMPERATURE RANGE	4
THE TEMPERATURE RANGE OF THIS PRODUCT IS -20~+65 °C	4
2.3 STORAGE TEMPERATURE RANGE	4
THIS PRODUCT IS STORED AT -30~+75 °C	4
3. GENERAL PRODUCT SPECIFICATIONS	4
4. PRODUCT SPECIFICATION DETAILS	5
4.1PRODUCT STRUCTURE PARAMETERS	5
4.2 PRODUCT ELECTRICAL PERFORMANCE TEST DATA	7
4.21 TESTING ENVIRONMENT AND INSTRUMENT EQUIPMENT	7
5. PRODUCT PACKAGING METHOD	10
PACKAGING METHOD:	10
PACKED IN SELF SEALING BAGS, EACH PACK CONTAINS 200PCS.	10
6. DOCUMENT RESUME	10



1. Both parties confirm

1.1 Customer confirmation signature

客户：卧安科技（深圳）有限公司

客户部门/职位	确认人签字	确认日期
硬件/射频		
结构		
项目经理		
商务/采购		
审核		

1.2 铄点科技确认签字

部门/职位	确认人签字	确认日期
天线工程师		
结构工程师		
项目经理		
QA		
审核		



2. General matters

2.1 Scope of application

This specification only applies to Woan Technology LOCK_ PRO antenna

2.2 Operating temperature range

The temperature range of this product is -20~+65 °C

2.3 Storage temperature range

This product is stored at -30~+75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	model	LOCK_PRO
2	Frequency band	2400-2500MHz
3	VSWR	≤ 2.0
4	impedance	50 Ω
5	Antenna type	PCB Antenna
6	Antenna implementation form	PCB



7	Antenna image	
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4. Product Specification Details

4.1Product structure parameters

4.11 Product material composition:

序号	材料	规格 (MM)
1		



2		
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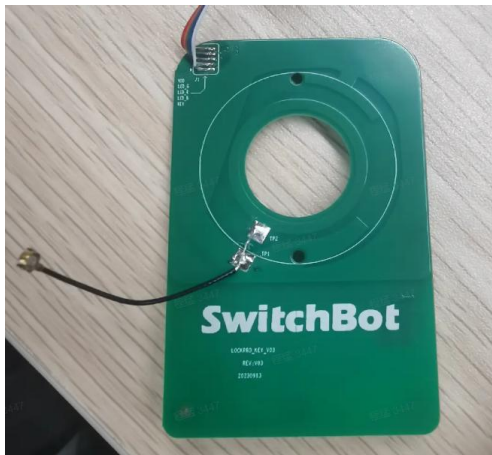
4.12 Appearance

The product has a good appearance, without serious defects such as scars, sweat marks, protrusions, etc. that seriously affect the appearance.

4.13 Structural dimensions

Reference product drawings:

Product drawings:





4.2 Product Electrical Performance Test Data

4.21 Testing Environment and Instrument Equipment

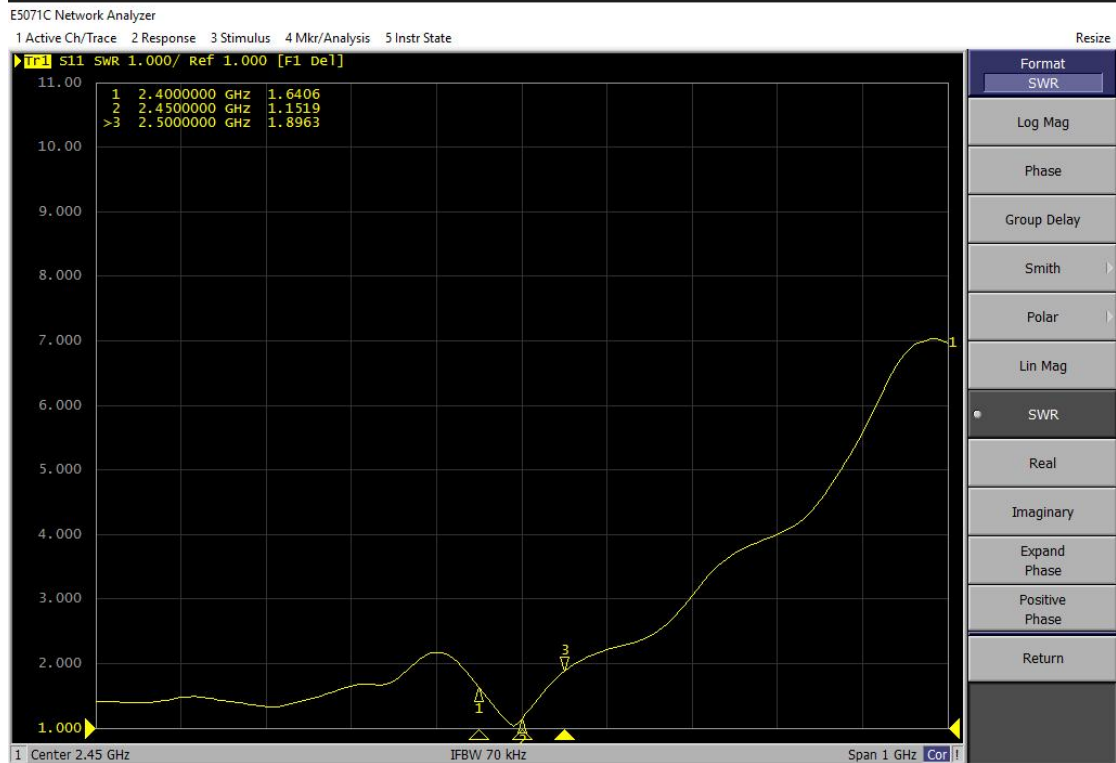
Test environment: Temperature: 10 °C -+30 °C Relative humidity: ≤ 80% (+40 °C) Atmospheric pressure: 750mmkg ± 30mmkg	Test equipment: network analyzer KEYSIGHT E5071C Multi probe full anechoic chamber
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4.22 Product electrical performance test data:

S11 diagram of the product:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-12.23	-23.66	-10.31
VSWR	1.64	1.15	1.89





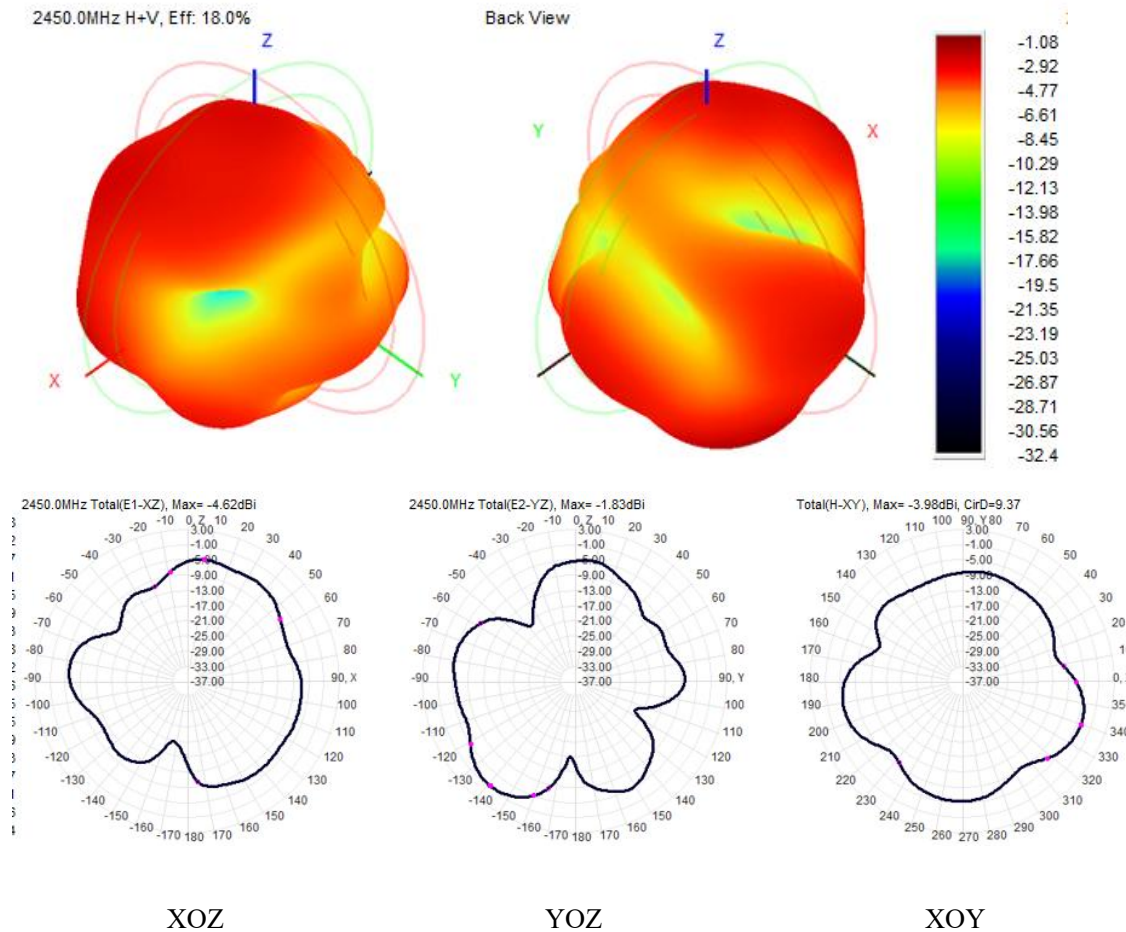
4. 23 Gain, efficiency, and radiation pattern

frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	-1.74	15.1
2410.0	-1.65	15.2
2420.0	-1.53	15.5
2430.0	-1.47	16.0
2440.0	-1.41	16.8
2450.0	-1.08	18.0
2460.0	-0.80	18.6
2470.0	-0.58	19.1
2480.0	-0.45	19.5
2490.0	-0.22	19.8
2500.0	0.13	20.1



Radiation pattern:

Frequency 2450MHz





5. Product packaging method

Packaging method:

Packed in self sealing bags, each pack contains 200PCS.

6. Document resume

文件编号 Document No.	
日期 Release Date	2023/10/07
编制 Author	Hungjie
复核 Review	WH

文件历次表

Revised History

Date	Version	Revised Record
2023/10/07	1.00	New Project