

Network HD camera HA-8407

WIFI antenna specification

1、Product overview

This specification applies to network HD camera HA-8407 WIFI antenna, which is designed for network HD camera and supports IEEE 802.11b /g/n wireless communication protocol.

2、Technical parameter

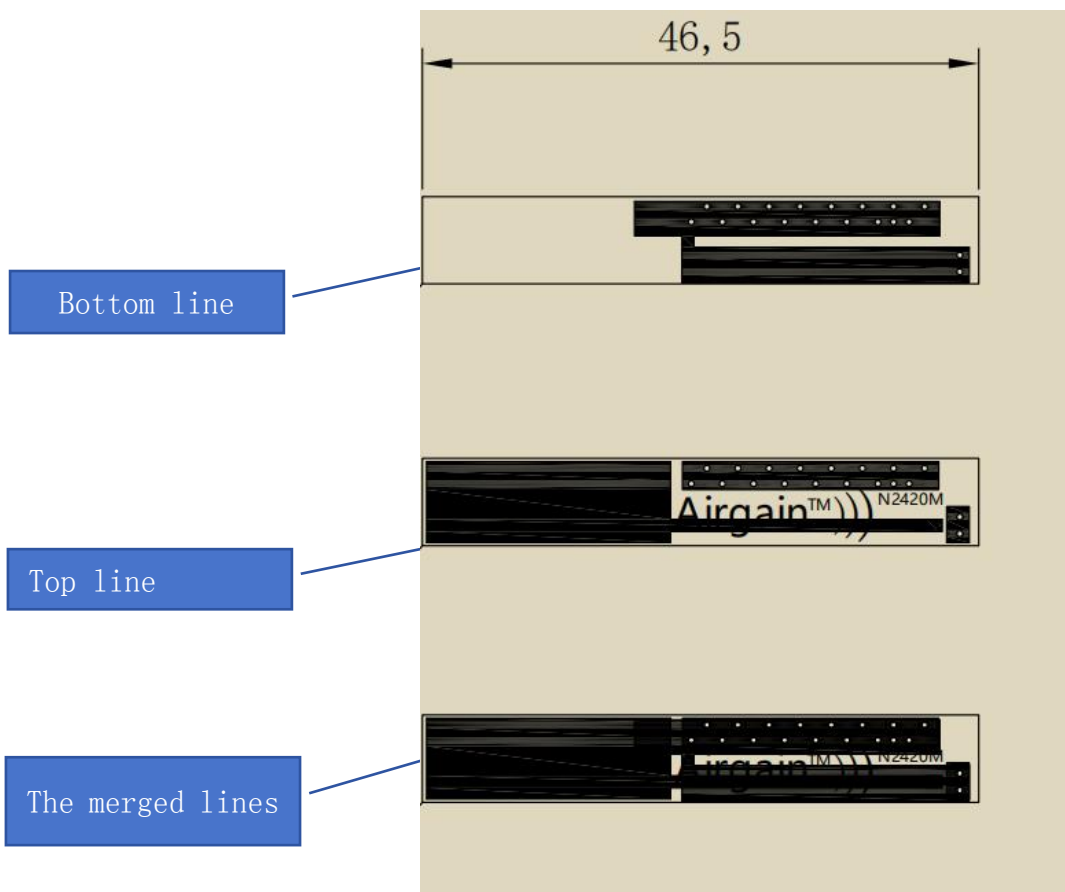
1. Product specification description

Parameter entry	specification
Operating frequency band	2.4GHz （2400–2500 MHz）
Wi-Fi standard	IEEE 802.11b/g/n 1T1R
Modulation mode	802.11b: CCK (11, 5.5Mbps), QPSK (2Mbps), BPSK(1Mbps) 802.11 g/n: OFDM
Receiving sensitivity	802.11g 6Mbps:–90.0dBm; 802.11g 54Mbps:–73.0dBm; 802.11n MCS7HT20:–71.0dBm
Connector Type	The external antenna is connected through the I-PEX RF port
Type of Antenna	External Antenna
Antenna type	HA-8407 Patch antenna
Bandwidth	802.11b/g/n 20MHz ≤20MHz
Security protocol	WEP. TKIP. AES. WPA. WPA2. WPA3
Impedance	50 Ω
Antenna gain peak	2.14dBi
Antenna manufacturer	Shenzhen Mei 'an technology Co., LTD
Address	19th Floor, Building 3A, Hengming ONE Investment & Promotion Center, Longping West Road, Longcheng Sub-district, Longgang District, Shenzhen, Guangdong

2. Mechanical characteristic

Parameter entry	specification
Bulk material	Case: PC+ABS
Interface type	With IPEX antenna base
Cable specification	1.13 Wire \ black \ one end strip length 2-2-4
External dimension	Line length 300MM, plate length 46.5MM

3. Antenna size diagram

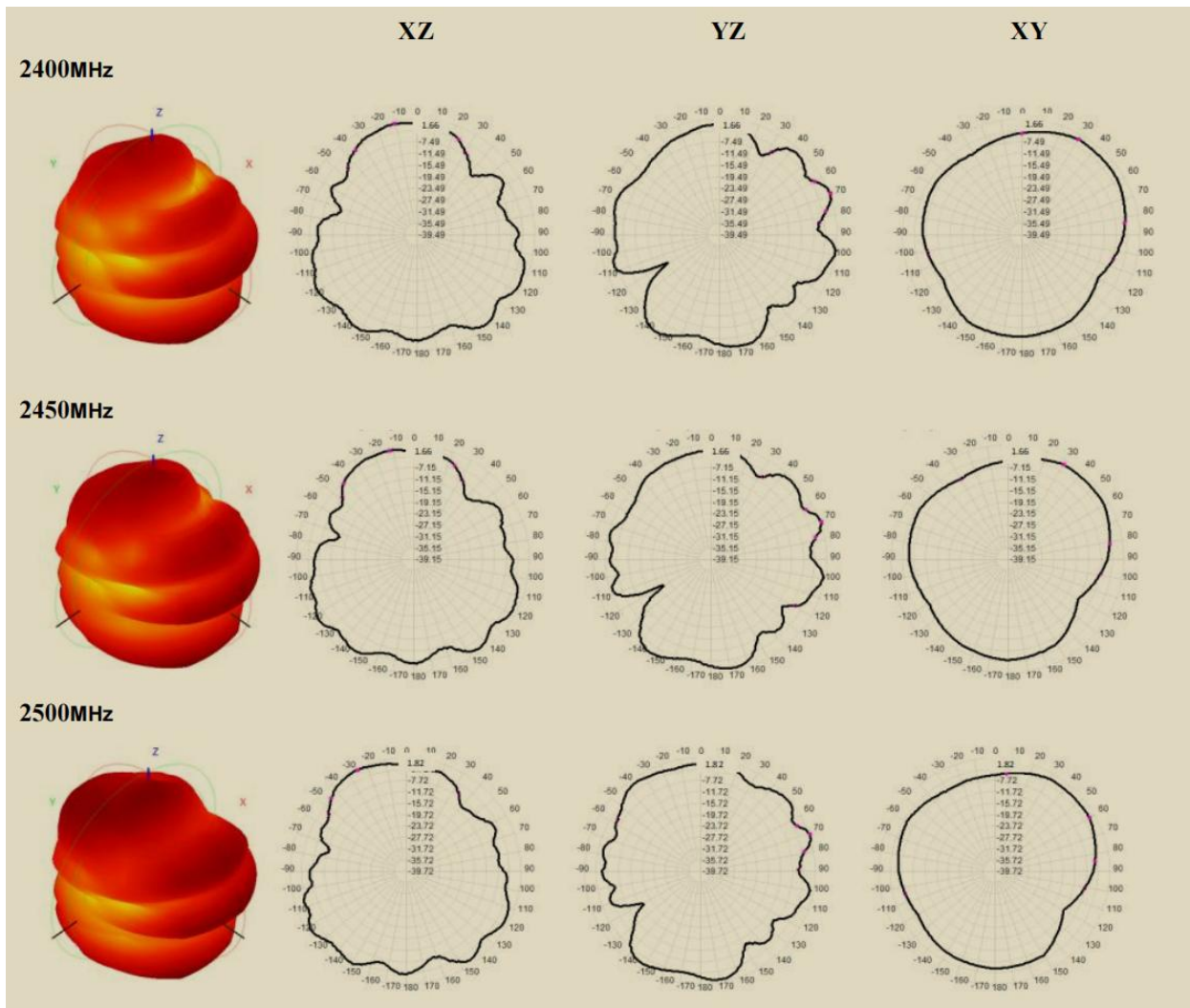


- 1) Sheet FR-4
- 2) Plate thickness 0.5
- 3) Scrub black oil
- 4) White characters

3、Antenna parameter test data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	1.66	1.71	1.72	1.68	1.85	1.90	2.08	2.14	2.04	1.94	1.82
Efficiency (%)	52.30	53.00	55.04	54.47	58.39	60.81	52.45	56.04	53.56	54.98	53.74

4、The radiation pattern of peak gain



5、 Environmental adaptability

Test item	enforce standards	Performance requirement
Operating temperature	GB/T 2423.1-2008	-20℃ ~ +85℃
Storage temperature	GB/T 2423.2-2008	-40℃ ~ +85℃
Salt spray test	GB/T 2423.17-2008	96 hours without corrosion
Vibration test	GB/T 2423.10-2008	10-500Hz, 30 minutes on each of the 3 axes

6、 Installation specification

6.1.Spatial layout suggestion

- The recommended installation spacing is at least 20cm
- Distance from metal barriers ≥ 15 cm
- The recommended installation Angle is $\pm 15^\circ$ vertically upwards

6.2 Electrical connection

The antenna radiation direction housing shall not be made of metal, or painted or plated with metal components on the surface of the plastic housing Layer, around the antenna to avoid the use of metal screws, metal rivets or other metal devices to affect the antenna radiation.

The distance from the top cover to the antenna will affect the performance of the antenna, and the farther the shell is from the antenna, the less the performance impact.

The distance between the upper and lower shell and the antenna will affect the performance of the antenna, and the farther the shell is from the antenna, the less the performance impact.

7、Test

7.1 Reliability test

- 2000 plug and remove life tests
- High and low temperature cycle test (-20°C↔+85°C, 100cycles)

Note: The parameters of this specification are based on laboratory standard conditions, and the actual performance may vary depending on the installation environment. Product upgrade without prior notice, please refer to the actual.