QCA9531 high-power 300Mbps

Ceiling AP V1.0 Spec

Specification Version 1.0.5

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Revision	Date	Contents of Revision Change	Remark
1.0.1	2016-08-30	First release	
1.0.2	2016-9-2	Modify the layout and description	
1.0.3	2017-1-19	Modify the block diagram	
1.0.4	2018-7-2	Update picture	
1.0.5	2022-10-26	Modify the parameter	WSY

INTRODUCTION

CeilingAP V1.0 is based on Qualcomm Atheros QCA9531 chip. It's up to 650mhz processor and support expand 5G WiFi or usb 3G/4G modem. Embedding 64/128MB RAM and 16/32MB ROM makes it quick launch wireless scenarios . Integrated high power PA and LNA , transmission distance is upgrade to farther.

Ceiling AP V1.0 can be powered by PoE （Passive 9-48V POE） or DC （12-48V）.

CeilingAP V1.0 not only has a good reception sensitivity and high transmission power, greatly expand the scope of wireless coverage ,but also beautiful appearance, convenient installation, suitable for ceiling, wall and desktop set. With special ceiling mount design ,Ceiling AP is not only space-saving, but also gives you full WiFi experience free from all obstacles. Besides, it's perfect match between the shell and the ceiling.

CeilingAP V1.0 is an ideal network solution for companies, hotels and other public places to extend WiFi range.

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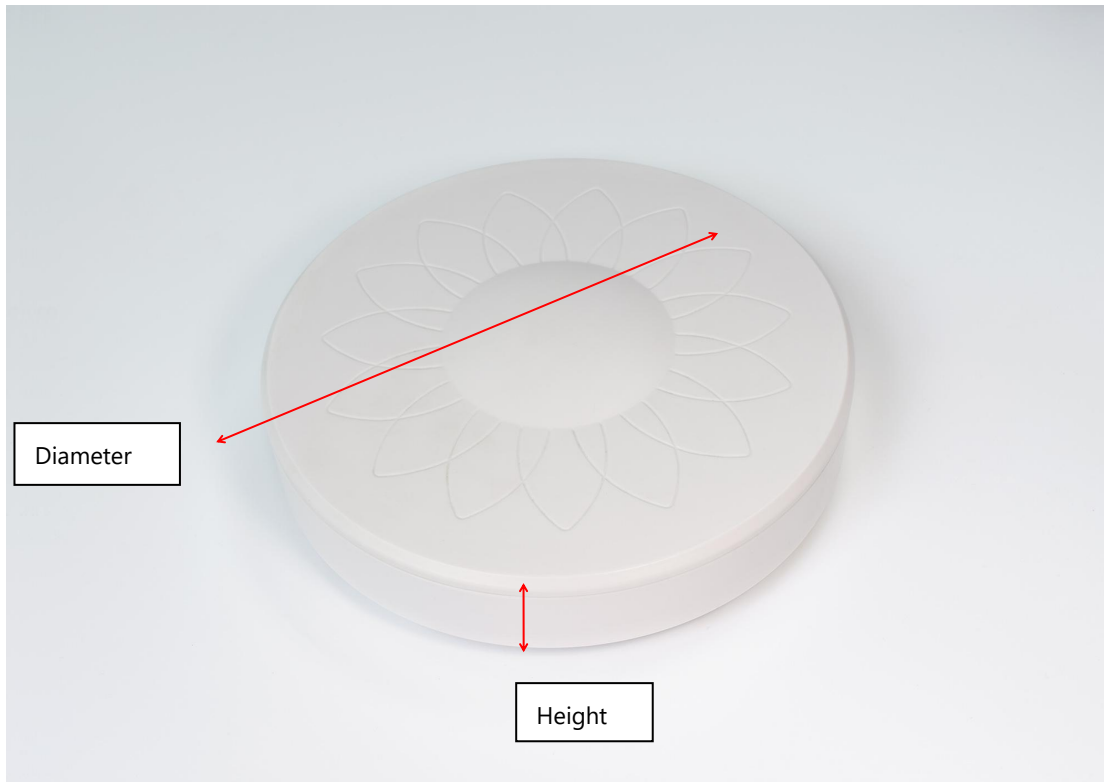Tell:+86-755-81720165   support@gainstrong.cn

FEATURES

■ Compatible with 2.4G IEEE 802.11b/g/n

■ Compatible MiniPci-e 5G IEEE 802.11a/b/g/n/ac card

■ Wireless speed up to 300 Mbps

■ Supports POE(Non-standard) Power Supply

■ Compatible DC 12-48V/2A~0.5A power supply

■ Support SSID based access user number restriction

■ Compatible with usb interface GSM/3G/4G modem.

■ Support MAC address filtering, IP address filtering, URL filtering, NAT forwarding rules

■ Support for automatic adjustment of wireless transmission rate

■ Practical and elegant ceiling mount design.
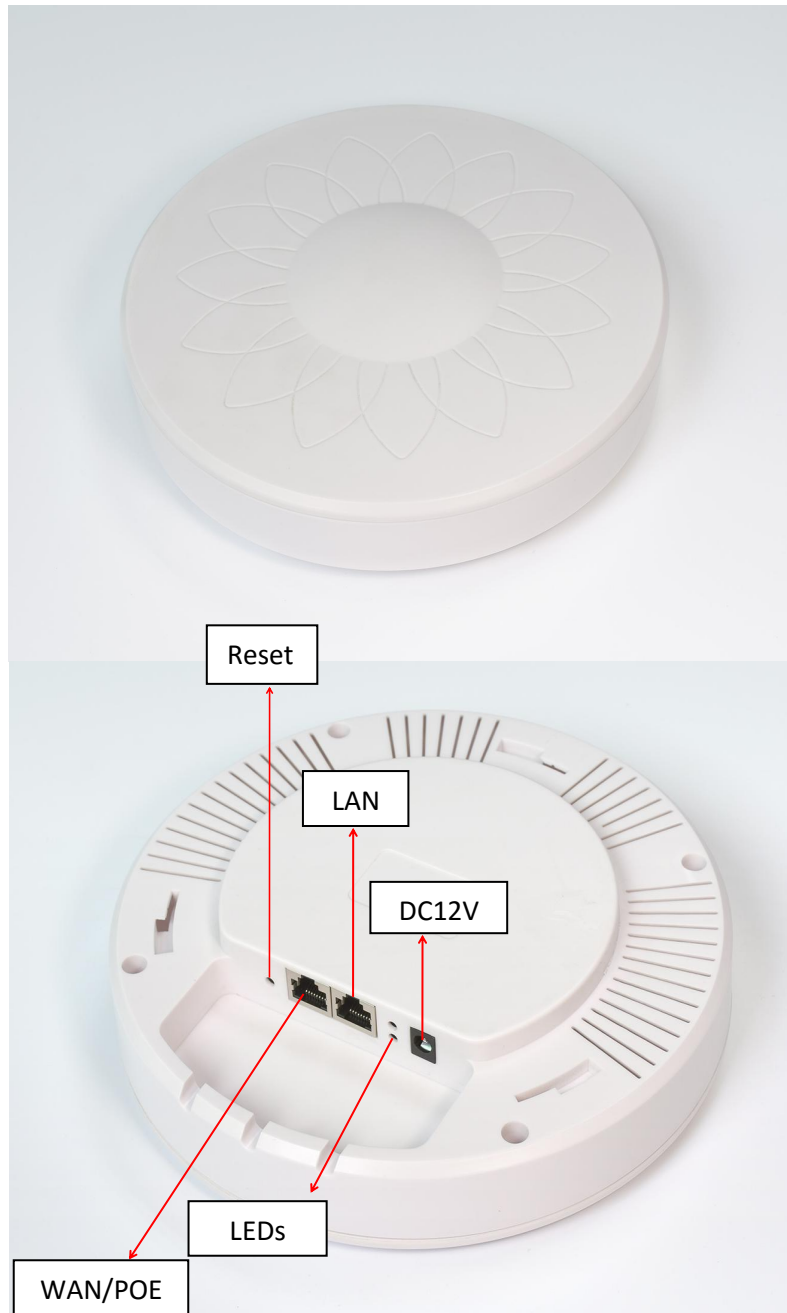
BLOCK DIAGRAM
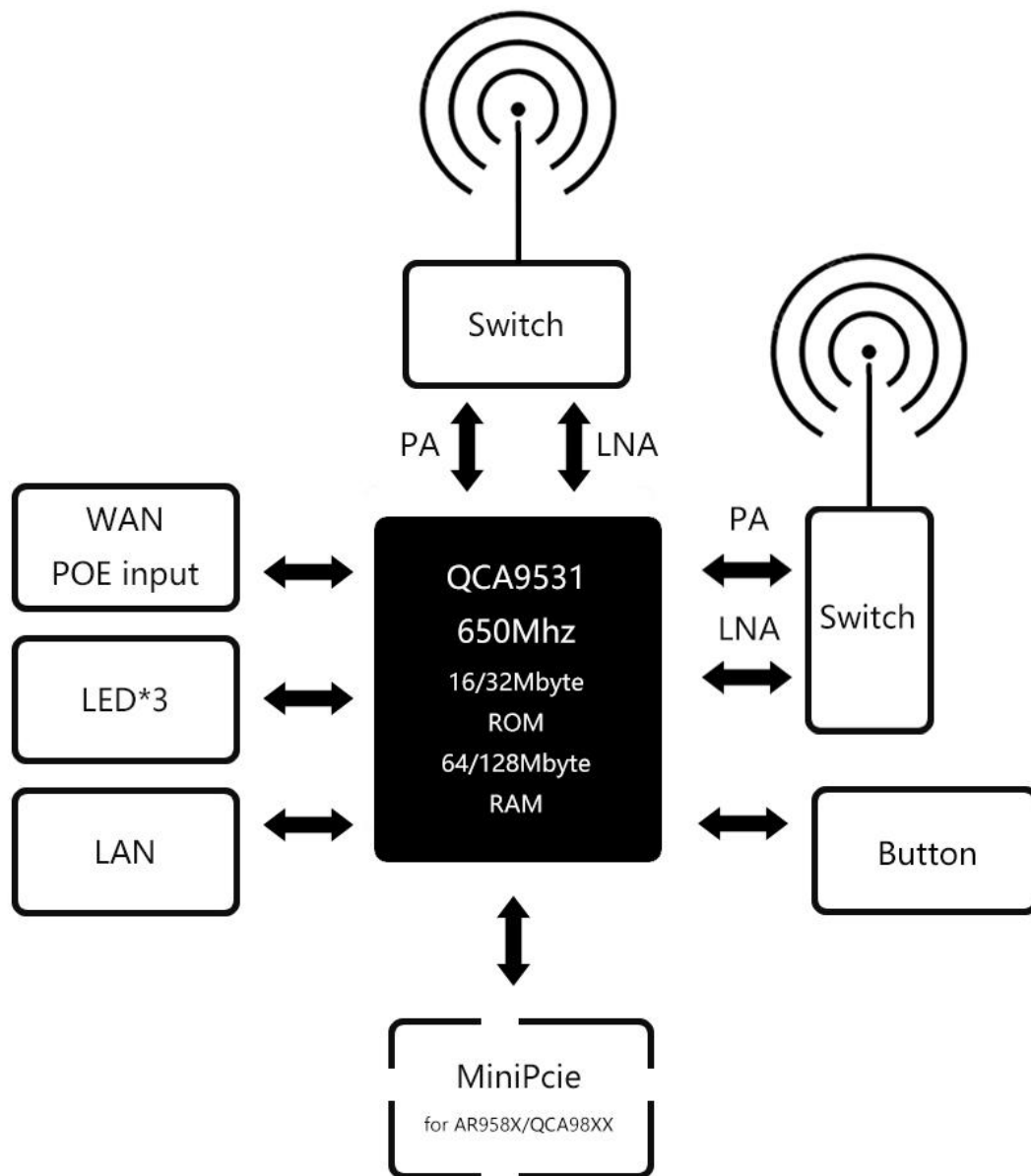
MECHANICAL

Dimensions (mm)	Diameter	Height
	206mm (Tolerance:±0.2mm)	34.5mm (Tolerance:±0.2mm)

PICTURES

ROUTER INTERNAL

TOP

BOTTOM

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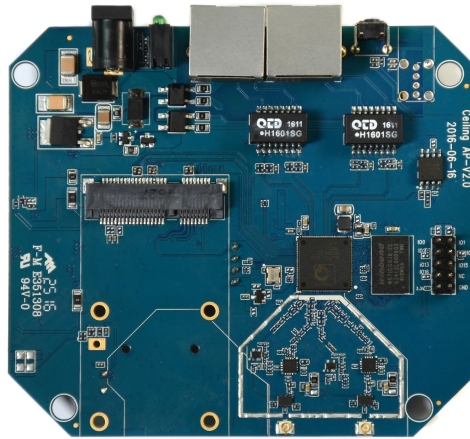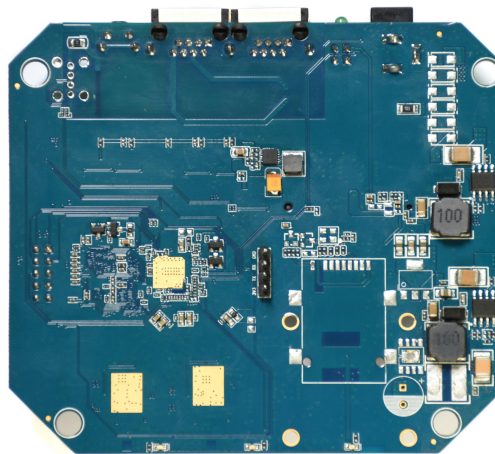
Length	Width	Height (without shield)
102.1mm (Tolerance:±0.2mm)	90.1mm (Tolerance:±0.2mm)	3.0mm (Tolerance:±0.2mm)

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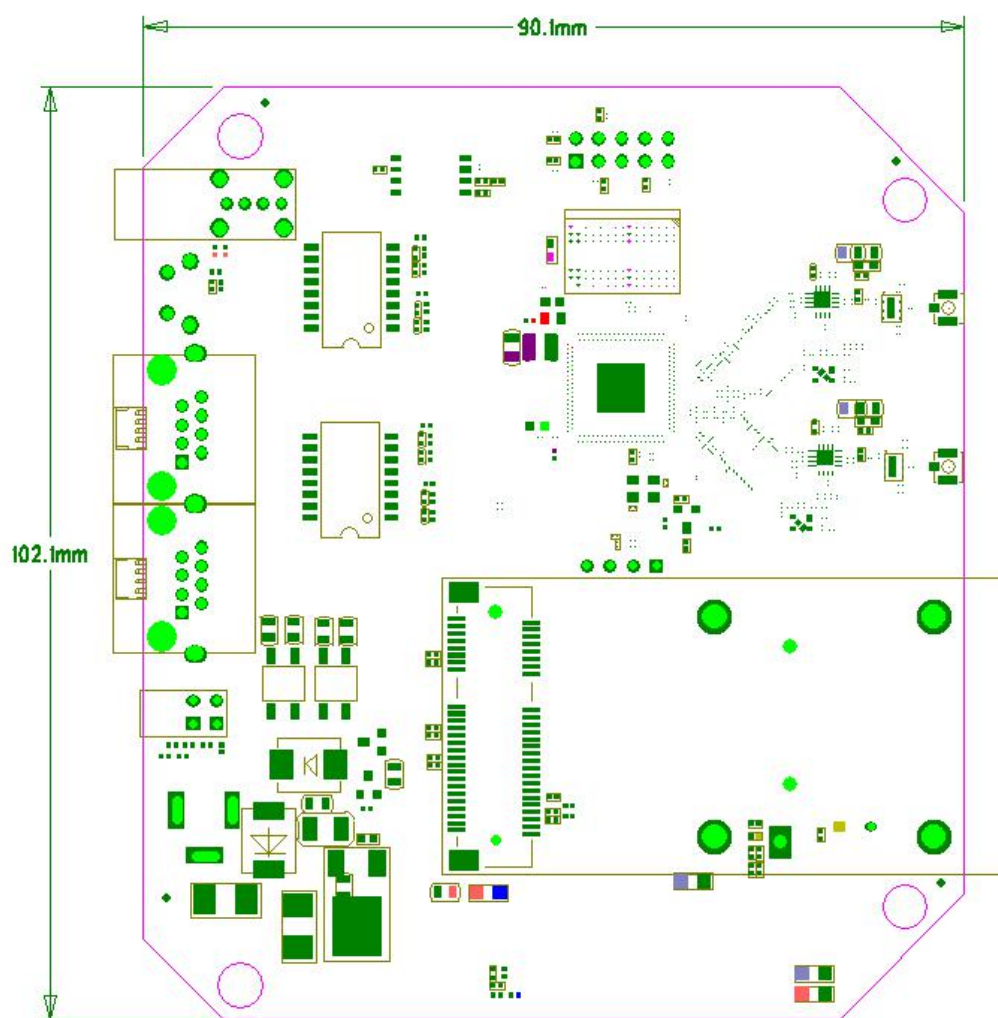
ENVIRONMENT

Operating Temperature	-10°C~55°C
Storage Temperature	-40°C ~70°C
Operating Humidity	10%~90% non-condensing
Storage Humidity	Storage Humidity: 5%~90% non-condensing

SPECIFICATIONS

Items	Contents
Interface	1 * 10/100Mbps WAN/POE
	1 * 10/100Mbps LAN
	1 * button
	1 * DC-12V
	2 leds for network&wifi or custom defined
	3 * LED(RED BLUE YELLOW) for custom defined
	1 * miniPCIe slot
Wireless Standards	IEEE 802.11b/g/n, IEEE802.11a/b/g/n/ac
Power	POE 9-48V/(Non -standard) or DC 12V 2A
Frequency	802.11b/g/n:2.4GHz-2.484GHz
	Minipcie card for 802.11a/n/ac : FCC or CE standard channel
Wireless Security	64/128/152-bitWEP,WPA/WPA2,WPA-PSK/WPA2-PSK
WAN Type	Dynamic IP, Static IP, PPPOE, PPTP, L2TP
DHCP	Server, Client,DHCP Client List, Address Reservation
Quality of Service	WMM, Band width Control
Port Forwarding	Virtual Server, Port Triggering,UPnP,DMZ
Dynamic DNS	DynDns, Comexe,NO-IP
Access Control	Local Management Control, Host List, Access Schedule, Rule Management
Coverage of black hole Detection and compensation	Support
Intelligent load balancing based on user,traffic,Frequency band	Support
Link integrity detection	Support

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Bandwidth limitation	Support the speed limit based on STA/SSID/AP	
Management	Access Control Local Management Remote Management	
Package Contents	Power Adapter Quick Installation Guide	
System Requirements	Microsoft® Windows® 98SE, NT,2000, XP, Vista™orWindows7, MAC® OS, Net Ware®, UNIX® or Linux	
Repeater bridge	Relay mode	support point to point, point to multipoint
	Relay band	support 2.4G/5.8G
	Wireless back	Support
MTBF	>250000H	
Item	type	target
Antenna 0	Frequency error	-5.0ppm
	power	CCK 11M 28± 2dBm OFDM 54M 22.0± 2dBm MCS7(HT20) 22.0± 2dBm MCS7(HT40) 22.0± 2dBm
	EVM	CCK 11M-15.0db OFDM 54M-25.0db MCS7(HT20)-28.0db MCS7(HT40)-28.0db
	Reception Sensitivity	CCK 11M -85dbm OFDM 54M -70dbm MCS7(HT20) -68dbm MCS7(HT40) -65dbm
Antenna 1	Frequency error	-5.0ppm
	power	CCK 11M 28± 2dBm OFDM 54M 22.0± 2dBm MCS7(HT20) 22.0± 2dBm MCS7(HT40) 22.0± 2dBm
	EVM	CCK 11M -15.0db OFDM 54M -25.0db MCS7(HT20) -28.0db

		MCS7(HT40)-28.0db
	Reception Sensitivity	CCK 11M -85dbm OFDM 54M -70dbm MCS7(HT20) -68dbm MCS7(HT40) -65dbm

sss