GAINSTRONG
Minibox V3.0

Specification Version 1.0.1

Author：James

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Revision	Date	Contents of Revision Change	Remark
1.0.0	2018-01-15	First release	James
1.0.1	2019-04-04	Update Features	James

1 PRODUCT OVERVIEW

General Description

MiniBox V3.0 is exquisite portable and small wireless router that supports 802.11b/g/b 2x2 2.4GHz WIFI. It compatible 802.11 a/b/g/n/ac maximum wireless rate can reach to 300Mbps. It is made up of base board and module. The base board use the QCA9531 chip that is a highly integrated and feature-rich IEEE802.11 b/g/n 2x2 2.4 GHz System-on-a-Chip (SoC) for advanced WLAN platforms.

MiniBox V3.0 has 2 FE (10/100Mbps) RJ45 Ethernet Ports which support both wired connection and wireless connection at the same time.it allowsusers not only able to share their internet by wired connection but also wireless connection. It's power consumption is very low.
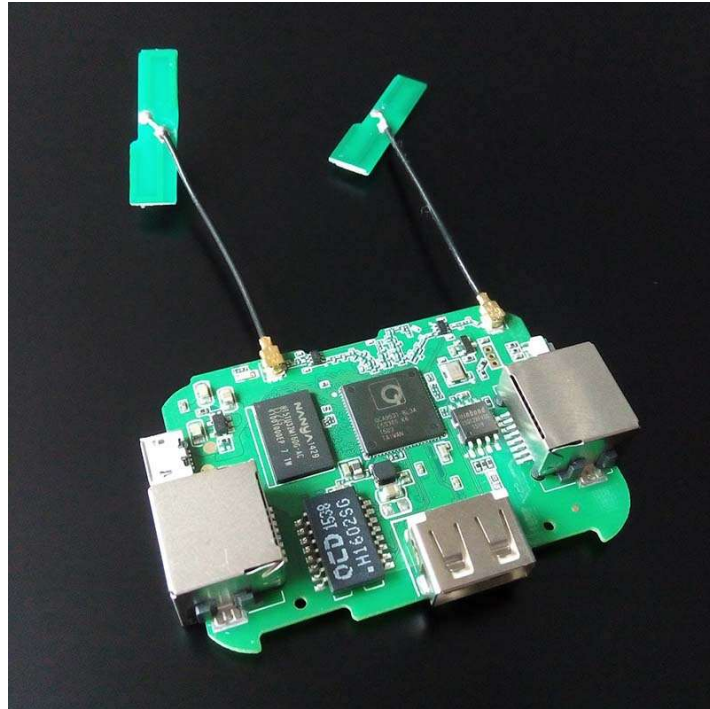
Features:

- CPU: QCA9531 with 650 MHz MIPS 24Kc
- WiFi:80211 b/g/n 2x2 2.4GHz 300Mbps
- RAM: 64MB/128MB DDR2 RAM(Optional)
- Flash: 8MB/16MB/32MB/64MB SPI NOR Flash (Optional)
- USB: 1×USB2.0(Optional)
- Power supply: 5V/1A DC
- Net Port: 1WAN+ 1 LAN 10/100Mbps FE
- Antenna: 2×Internal antenna.
- 1×RESET Button
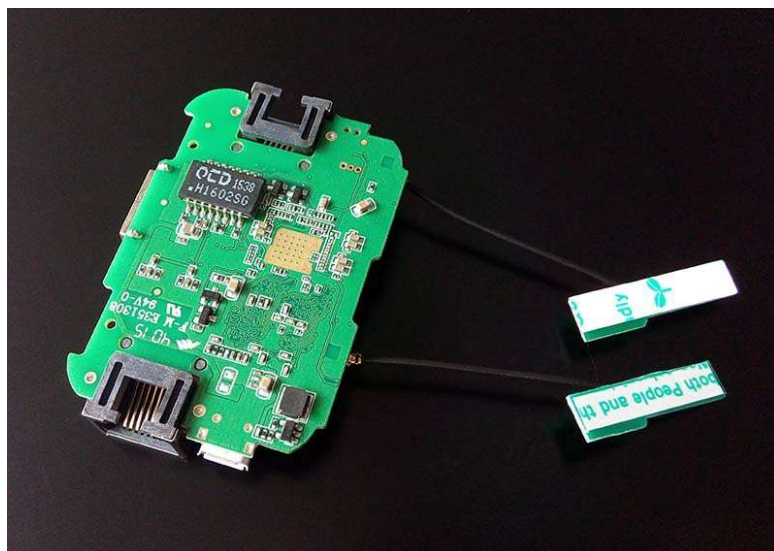- 1×UART console(In the housing)

Applications:

- Smart home network equipment
- Wireless WIFI device
- Industrial field

2 PICTURES

Positive graph:

Negative graph:

3.MECHANICAL

Dimensions (mm)	Length	Width	Height
	64.0	44.7	22.5
	(Tolerance:±0.2mm)	(Tolerance:±0.2mm)	(Tolerance:±0.2mm)

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4. ELECTRICAL SPECIFICATIONS

Items	Contents
Wireless Standards	IEEE 802.11n, IEEE 802.11g, IEEE 802.11b
Frequency	2.412GHz - 2.472GHz
Signal Rate	11n: Up to 2x150Mbps(dynamic)
	11g: Up to 2x54Mbps(dynamic)
	11b: Up to 2x11Mbps(dynamic)
Wireless Modes	AP Mode, Router Mode
Wireless Functions	Enable/Disable Wireless Radio, WDS Bridge, WMM, Wireless Statistics
Wireless Security	64/128/152-bit WEP, 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, Bandwidth Control
Port Forwarding	Virtual Server, Port Triggering, UPnP, DMZ
Dynamic DNS	DynDns, Comexe, NO-IP
VPN Pass-Through	IPSec, OpenVPN, PPTP, L2TP, GRE
Access Control	Local Management Control, Host List, Access Schedule, Rule Management
Firewall Security	DoS, SPI FirewallIP Address Filter/MAC Address Filter/Domain Filter IP and MAC Address Binding
Management	Access Control Local Management Remote Management
Certification	CE, FCC
Package Contents	Power Adapter Quick Installation Guide
System Requirements	Microsoft® Windows® 98SE, NT, 2000, XP, Vista^{TM} or Windows 7, MAC® OS, NetWare®, UNIX® or Linux

RF hardware performance

Item	type	measured parameters
Antenna 0	Frequency error	-1.0ppm
	power	CCK 11M 16.0dbm OFDM 54M 13.5dbm MCS7(HT20) 13.5dbm MCS7(HT40) 13.0dbm
	EVM	CCK 11M -30.0db OFDM 54M -32.0db MCS7(HT20) -31.0db MCS7(HT40) -31.0db
	Reception Sensitivity	CCK 11M -85dbm OFDM 54M -65dbm MCS7(HT20) -62dbm MCS7(HT40) -61dbm

Item	type	measured parameters
Antenna 1	Frequency error	-1.0ppm
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	EVM	CCK 11M -30.0db OFDM 54M -32.0db MCS7(HT20) -31.0db MCS7(HT40) -31.0db
	Reception Sensitivity	CCK 11M -85dbm OFDM 54M -65dbm MCS7(HT20) -62dbm MCS7(HT40) -61dbm

5.ENVIRONAMENT

Operating Temperature	0℃ ~ 70℃
Storage Temperature	-40℃ ~ 70℃
Operating Humidity	10%~90% non-condensing
Storage Humidity	Storage Humidity: 5%~90% non-condensing

6.HOUSING