

WellLinkage

Specification
For
USB 802.11 ac/a/b/g/n
WiFi USB Nano dongle
UW2003A
Rev. 1.0

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■ Overview

UW2003A is 802.11 ac/a/b/g/n 2.4G/5G dual band 1T1R USB Nano dongle. It run up to 433Mbps (MCS9) 5G and 150Mbps 2.4G and delivers superior WiFi output up to 16dBm. It use highly integrated SOC chip RTL8811CU.

UW2003A have small form factor and high performance design for wireless connection with popular USB interface. It is good choose for high throughput networking and multimedia application. In addition, it not only support WPS for easy connection, but also support security encryption through WPA, WPA2 ..and so on.



■ Feature:

1. Dual band 1T1R mode with support of 433Mbps 5G + 150Mbps 2.4G PHY rate
2. IEEE 802.11 a/b/g/n and 802.11ac client
3. Transmit Beamforming and STBC
4. QOS: WFA WMM, WMM PS
5. Security : WFA WPA/WPA2 personal, WAPI, WPS2.0
6. Integrate high efficiency switching regulator
7. Supports 802.11w protected managed frames
8. Support WPS
9. Supports Wi-Fi Direct
10. Antenna: IPEX antenna
11. USB 2.0/1.1 USB-A type Nang dongle
13. Support Windows XP, Vista, Win 7, Win8, Linux 2.6.x

■ Application:

Desk-Top/Mini PC/Note-Book

Mobile, portable smart device

Set-top box/Media player

Tablet

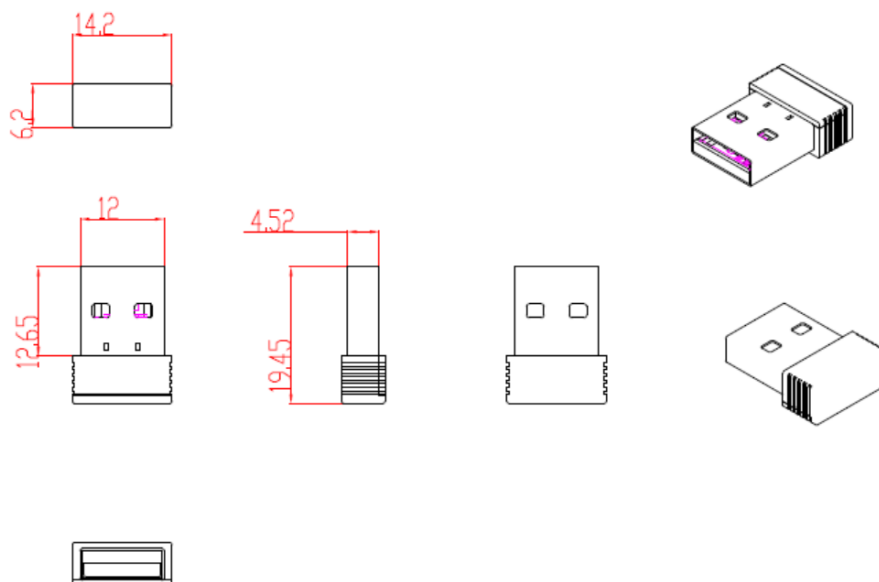
Blue-ray Disk

■ Property:

Main Chip	Realtek RTL8811CU
WiFi Standard	IEEE 802.11 a/b/g/n/ac
Frequency	2.4~2.4835GHz 5.15GHz ~5.850GHz
USB type	2.0/1.1
Data Rates	11ac: MCS0 ~MCS9
	11n: MCS0~MCS7
	11a/g: 6~54 Mbps
	11b:1~11 Mbps
Modulation	802.11ac:OFDM(BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) 802.11a/n/g:(BPSK, QPSK, 16-QAM, 64-QAM) 802.11b:(DBSK,DQPSK,CCK)
TX power	802.11ac HT20: 12+/-1.5dBm@MCS8 802.11ac HT40: 12+/-1.5dBm@MCS9 802.11ac HT80: 12+/-1.5dBm@MCS9 802.11a/g: 12 +/-1.5dBm@54Mbps 802.11gn HT20: 12+/-1.5dBm@MCS7 802.11gn HT40: 12+/-1.5dBm@MCS7 802.11an HT20: 12+/-1.5dBm@MCS7 802.11an HT20: 12+/-1.5dBm@MCS7

	802.11b: 15+/-1.5dBm@11Mbps
RX Sensitivity	802.11ac: -59dBm+/-2dBm @HT20 MCS8 802.11ac: -56dBm+/-2dBm @HT40 MCS9 802.11ac: -51dBm+/-2dBm @HT80 MCS9 802.11n: -66dBm+/-2dBm @HT20 MCS7 802.11n: -63dBm+/-2dBm @HT40 MCS7 802.11a/g: -67dBm+/-2dBm@54Mbps 802.11b: -73dBm+/-2dBm@11Mbps
Power Consumption	Idle : 38mA Continue RX: 240mA Continue TX: 355mA
Environment	Operation Temperature Range -20~60°C Storing Temperature Range -10~70°C Operation Humidity: 5% ~ 90% Storing Humidity: 5% ~ 90%

■ Production Dimension:



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: -- Reorient or relocate the receiving antenna. -- Increase the separation between the equipment and receiver. -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. -- Consult the dealer or an experienced radio/TV technician for help.

Specific Absorption Rate (SAR) information:

This Nano dongle meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

FCC RF Exposure Information and Statement The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: UW2003A (FCC ID: QUYUW2003A) has also been tested against this SAR limit. The highest SAR value reported under this standard during product certification for use at when properly worn on the body is 1.23W/kg This device was tested for typical body-worn operations with the back of the Nano dongle kept 0mm from the body.

Body-worn Operation

This device was tested for typical body-worn operations. To comply with RF exposure requirements, a minimum separation distance of 0mm must be maintained between the user's body and the handset, including the antenna. Third-party belt-clips, holsters, and similar accessories used by this device should not contain any metallic components.

Body-worn accessories that do not meet these requirements may not comply with RF exposure requirements and should be avoided. Use only the supplied or an approved antenna.