

WUBT-239ACN(BT) Dongle

802.11ac/a/b/g/n 2T2R Wi-Fi + Bluetooth 5.0 USB

Dongle

SparkLAN **WUBT-239ACN(BT) Dongle** is a highly integrated single-chip Wireless LAN (WLAN), Bluetooth USB dongle which supports 2 streams 802.11ac solutions with multi-user MIMO (Multiple-Input, Multiple-Output) wireless LAN (WLAN) and integrated Bluetooth 5.0. It is integrated 2Tx2R WLAN MAC, baseband, and dual band RF in a single chip USB dongle. **WUBT-239ACN(BT) Dongle** provides a cost effective solution for M2M (machine to machine) connectivity product/device by one USB port.

WUBT-239ACN(BT) Dongle 802.11ac/abgn 2Tx2R USB WLAN/BT dongle with various USB input format & internal printing or external RF antenna connector for high performance wireless LAN and Bluetooth device. It is designed to provide completely M2M connection & excellent cost performance with low power consumption and enhance the advantages of robust system & applications.

Embedded Application

Applications include portable handheld devices, thin client computer, medical devices, network security & monitoring, 3D printer, TV, STB, POS, digital signs, gaming machine, robotic machinery, industrial tablets, etc.

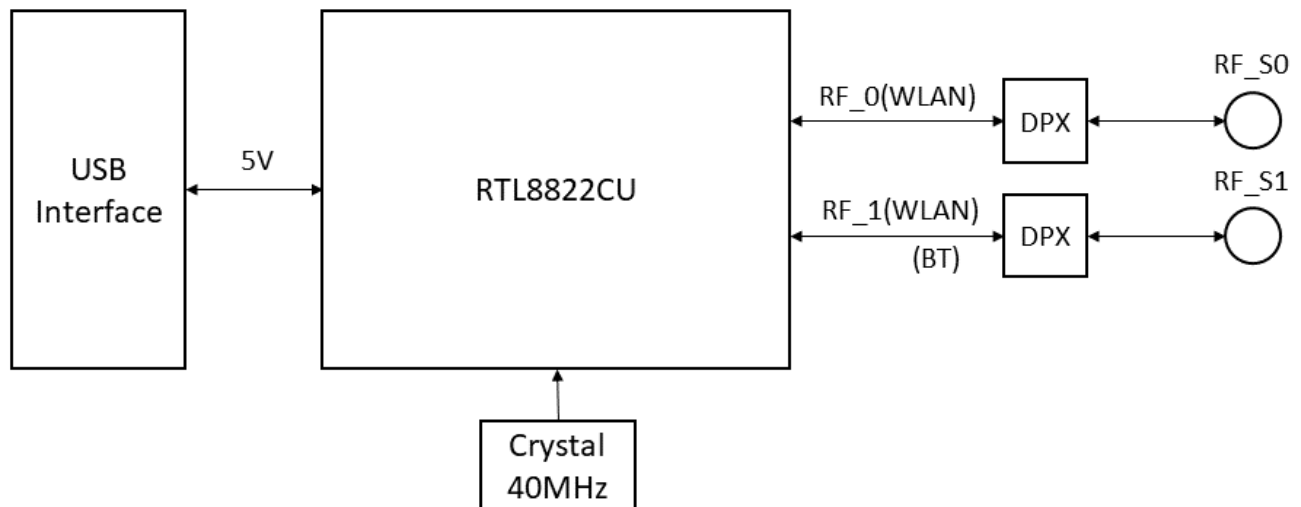
Key Feature

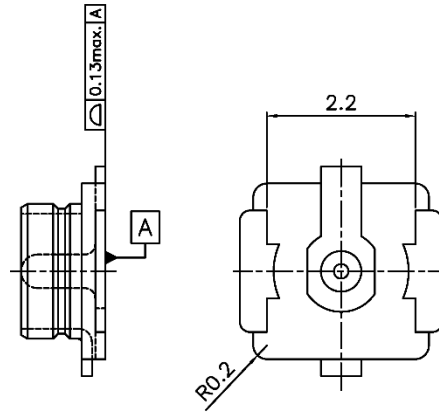
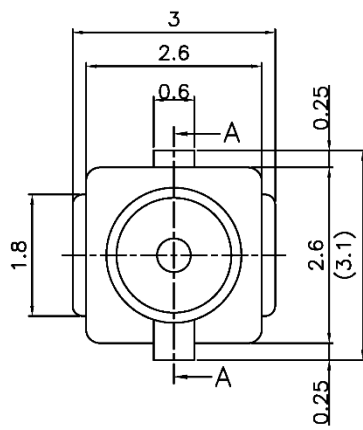
- 802.11ac/a/b/g/n Wi-Fi +Bluetooth 5.0
- Support 802.11ac 2x2, compliant with MU-MIMO. Operates in 2.4GHz and 5GHz frequency bands
- Maximum data rates: 54Mbps in 802.11g, 300Mbps in 802.11n, 866.7Mbps in 802.11ac.
- BT 5.0 features including Low-Energy 2 Mbps

Specification

Standards	IEEE 802.11ac/a/b/g/n (2T2R) Bluetooth V5.0, V4.2, V4.1, V4.0 LE, V3.0+HS, V2.1+EDR
Chipset	Realtek RTL8822CU
Data Rate	802.11b: 11Mbps 802.11a/g: 54Mbps 802.11n: MCS0~7 802.11ac: MCS0~9 Bluetooth: 1Mbps, 2Mbps and up to 3Mbps EDR
Operating Frequency	IEEE 802.11 ac/a/b/g/n ISM Band: 2.412GHz~2.484GHz, 5.150GHz~5.850GHz *Subject to local regulations
Interface	WLAN: USB ; Bluetooth: USB
Form Factor	4-Pin Wafer connector / USB Type A
Antenna	2 x IPEX MHF1 connectors or printed antenna for 2T2R (ANT0 for WIFI only, ANT1 for WIFI+BT)
Modulation	WiFi : 802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11a: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) BT: Header: GFSK Payload 2M: $\pi/4$ -DQPSK Payload 3M: 8-DPSK
Power Consumption	TX mode RX mode
Operating Voltage	DC 5V

Block Diagram





Unit: mm

Installation

- Connect the Dongle to USB slot of the computer.
- Install Wi-Fi driver.
- After the Wi-Fi Driver is installed, click the Network icon on the Windows, then search the network , and connect the Wireless Network you want.

Federal Communication Commission Interference Statement:

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.

Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

RF exposure statements

The product complies with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

This equipment should be installed and operated with minimum distance 5mm between the radiator & your body.

Industry Canada statement:

This device complies with Industry Canada license-exempt RSSs. Operation is subject to the following two conditions:

- 1) This device may not cause interference, and

2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) l'appareil ne doit pas produire de brouillage;
- 2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

- 1) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
- 2) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
- 3) For devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits specified for point-to-point and non-point-to-point operation as appropriate; and

Avertissement:

- 1) Le dispositif fonctionnant dans la bande 5150-5250 MHz est réservé uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;
- 2) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limitation P.I.R.E.;
- 3) Le gain maximal d'antenne permis pour les dispositifs avec antenne(s) amovible(s) utilisant la bande 5725-5850 MHz doit se conformer à la limitation P.I.R.E. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

Radio Frequency (RF) Exposure Information

The radiated output power of the Wireless Device is below the Industry Canada (IC)

radio frequency exposure limits. The Wireless Device should be used in such a manner such that the potential for human contact during normal operation is minimized.

This device has been evaluated for and shown compliant with the IC Specific Absorption Rate ("SAR") limits when operated in portable exposure conditions.

This equipment should be installed and operated with minimum distance 5mm between the radiator & your body.

Informations concernant l'exposition aux fréquences radio (RF)

La puissance de sortie émise par cet appareil sans fil est inférieure à la limite d'exposition aux fréquences radio d'Industrie Canada (IC). Utilisez l'appareil sans fil de façon à minimiser les contacts humains lors d'un fonctionnement normal.

Cet appareil a été évalué et démontré conforme aux limites de DAS (Débit d'absorption spécifique) d'IC lorsqu'il est utilisé dans des conditions d'exposition à des appareils portables.

Cet équipement doit être installé et utilisé avec une distance minimale de 5 mm entre le radiateur et votre corps.