



Brand name: Varex Imaging Corporation

Model name: WUBT-236ACN(BT)[MN]

802.11ac/a/n 2T2R Wifi USB Module

Support Multiple Operation Systems (Android/Linux/Windows)

Varex Imaging Corporation WUBT-236ACN(BT)[MN] is a highly integrated single-chip Wireless LAN (WLAN). It is integrated 2T2R WLAN MAC, baseband, and dual band RF in a single chip. WUBT-236ACN(BT)[MN] provides a cost effective solution for M2M (machine to machine) connectivity product/device by one USB port, it can be easily integrated into the most familiar operation system (Android/Linux/Windows). .

802.11ac/a/n 2T2R Wifi USB Module with various USB input format & internal printing or external RF antenna connector for high performance wireless LAN 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.

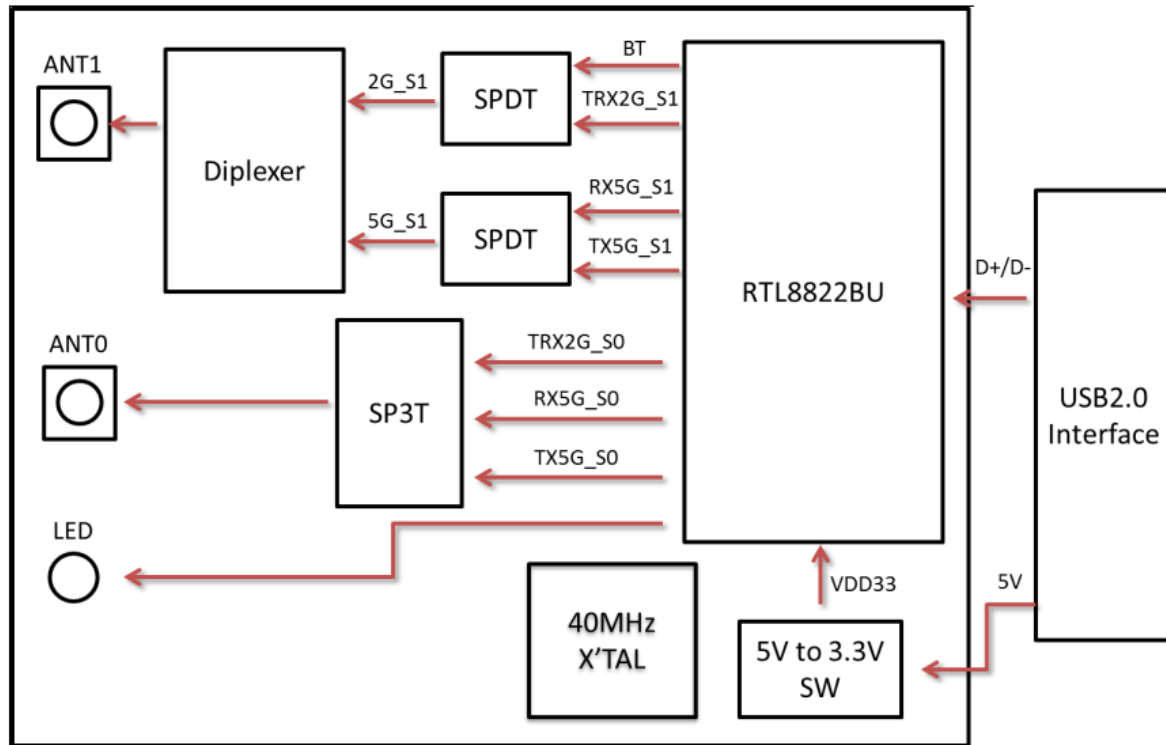
Key Feature

- 802.11ac/a/n Wi-F
- Support 802.11ac 2x2, compliant with MU-MIMO
- Maximum data rates:
300Mbps in 802.11n, 866.7Mbps in 802.11ac.

Specification

Standards	IEEE 802.11ac/a /an(2T2R)
Chipset	Realtek RTL8822BU-CG
Data Rate	802.11a:54Mbps 802.11n:MCS0~15 802.11ac: MCS0~9
Operating Frequency	FCC & IC: 5.15-5.25 GHz, 5.725-5.85 GHz Japan: 5.15-5.25 GHz *Subject to local regulations
Interface	WLAN: USB
Antenna	ANT0 for WLAN 11a only, ANT0+ ANT1 for WLAN 11 an/ac
Modulation	Wi-Fi : 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)
Power Consumption	TX mode: 450Ma(Max.) RX mode: 250mA(Max.)
Operating Voltage	DC 5V
Operating Temperature Range	-20°C~70°C
Storage Temperature Range	-40°C~80°C
Humidity (Non-Condensing)	5%~95% (Operating) 5%~90% (Storing)
Security	64/128-bits WEP, WPA, WPA2, 802.1x

Block Diagram



Pin	Description
Pin_1	USB 5V
Pin_2	USB D-
Pin_3	USB D+
Pin_4	USB GND
LED	WiFi LED
Ant_0	RF Antenna for WLAN 11a
Ant_0 + Ant_1	RF Antenna for WLAN 11 an/ac



Federal Communication Commission Interference Statement:

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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

This module limit can be used to install in the host below:

Product name: Digital Image Receptor

Model: 4336W-G5

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.

These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is **1.319 W/kg**.

CFR 47 FCC PART 15 SUBPART B and SUBPART E has been investigated. It is applicable to the modular transmitter.

Any company of the host device which install this modular with limit modular approval should perform the test of radiated & conducted emission and spurious emission, etc. according to FCC part 15E : 15.407 and 15B Class A requirement, Only if the test result comply with FCC part 15E : 15.407 and 15B Class A requirement , then the host can be sold legally.

The devices must be installed and used in strict accordance with the manufacturer's instructions as



described in the user documentation that comes with the product.

We will retain control over the final installation of the modular such that compliance of the end product is assured. In such cases, an operating condition on the limit modular approval for the module must be only approved for use when installed in devices produced by a specific manufacturer. If any hardware modify or RF control software modify will be made by host manufacturer, C2PC or new certificate should be apply to get approval, if those change and modification made by host manufacturer not expressly approved by the party responsible for compliance ,then it is illegal.

This radio transmitter ZZ6-WUBT236ACNBT has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Unique antenna connector (Hirose U.FL) must be used on the Part 15 authorized transmitters used in the host product.

Antenna Type	Antenna Model	Maximum Gain (dBi)	Remark
		5GHz	
PCB Antenna	XRpad CBSA P/N: 45524302	5.9 dBi	

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: “Contains Transmitter Module FCC ID: ZZ6-WUBT236ACNBT” Or “Contains FCC ID: ZZ6-WUBT236ACNBT”

The modular transmitter is only FCC authorized for the specific rule parts (i.e., FCC transmitter rules) listed on the grant, and the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. The final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

Industry Canada statement:

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada



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 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 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.

Radiation Exposure Statement:

These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 1.319 W/kg.

Déclaration d'exposition aux radiations:

Ces exigences fixent une limite DAS de 1,6 W / kg en moyenne sur un gramme de tissu. La valeur SAR la plus élevée rapportée dans le cadre de cette norme lors de la certification du produit pour une utilisation lorsqu'il est correctement porté sur le corps est de 1,319 W / kg. Please see lead time / necessary sample / Standard as below:

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.



This radio transmitter (IC: 9909A-UBT236ACNBT has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (IC: 9909A-UBT236ACNBT a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés cidessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna Type	Antenna Model	Maximum Gain (dBi)	Remark
		5GHz	
PCB Antenna	XRpad CBSA P/N: 45524302	5.9 dBi	

If the ISED certification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: “Contains IC: 9909A-UBT236ACNBT”.

Si le numéro de certification ISDE n'est pas visible lorsque le module est installé à l'intérieur d'un autre appareil, alors l'extérieur de l'appareil dans lequel le module est installé doit également afficher une étiquette faisant référence au module inclus. Cette étiquette extérieure peut utiliser un libellé comme celui-ci: “ Contient IC: 9909A-UBT236ACNBT”.

Manual Information To the End User:

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user’s manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.



Manuel d'information à l'utilisateur final

L'intégrateur OEM doit être conscient de ne pas fournir des informations à l'utilisateur final quant à la façon d'installer ou de supprimer ce module RF dans le manuel de l'utilisateur du produit final qui intègre ce module. Le manuel de l'utilisateur final doit inclure toutes les informations réglementaires requises et avertissements comme indiqué dans ce manuel.

The end user manual shall include FCC Part 15 /ISED RSS GEN compliance statements related to the transmitter as shown in this manual.

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B, ICES 003.

Host manufacturer is strongly recommended to confirm compliance with FCC/ISED requirements for the transmitter when the module is installed in the host.

Must have on the host device a label showing Contains FCC ID: ZZ6-WUBT236ACNBT, Contains IC: 9909A-UBT236ACNBT

The use condition limitations extend to professional users, then instructions must state that this information also extends to the host manufacturer's instruction manual.

If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.