

USER MANUAL

802.11n, 2.4G 1T1R Wireless LAN USB Module

WN4631R

MediaTek MT7601U

Version 1.1

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PRODUCT FEATURES

- Operate at ISM frequency Band (2.4GHz)
- IEEE Standards Support, 802.11b, 802.11g and 802.11n
- Fully comply with USB 2.0 high speed mode
- Enterprise level security supporting: WPA, WPA2, WPS, WAPI
- One-stream IEEE 802.11n support for 20MHz and 40MHz bandwidth channels provides PHY layer rates up to 150Mbps
- Support Wi-Fi Direct
- RoHS compliance
- Low Halogen compliance

PRODUCT SPECIFICATIONS

MAIN CHIPSET

MAC/ Baseband/ RF: MediaTek MT7601U

FUNCTIONAL SPECIFICATIONS

Wi-Fi Function	
Standard	IEEE802.11b; IEEE 802.11g; IEEE 802.11n
Bus Interface	USB2.0
Data Rate	<p><i>802.11b:</i> 11, 5.5, 2, 1 Mbps</p> <p><i>802.11g:</i> 54, 48, 36, 24, 18, 12, 9, 6 Mbps</p> <p><i>802.11n:</i> MCS 0 to 7 for HT20MHz MCS 0 to 7 for HT40MHz</p>
Media Access Control	CSMA/CA with ACK
Modulation Techniques	<p><i>802.11b:</i> CCK, DQPSK, DBPSK</p> <p><i>802.11g:</i> 64QAM, 16QAM, QPSK, BPSK</p> <p><i>802.11n:</i> 64QAM, 16QAM, QPSK, BPSK</p>
Network Architecture	Ad-hoc mode (Peer-to-Peer) Infrastructure mode
Operation Channel	<p><i>2.4GHz</i> 11: (Ch. 1-11) – United States 13: (Ch. 1-13) – Europe 14: (Ch. 1-14) – Japan</p>
Frequency Range	<p><i>802.11bg</i> 2.412 ~ 2.4835 GHz</p>
Transmit Output Power – 1x1 (Tolerance: ±1.5dBm)	<p><i>802.11b:</i> 16 dBm@11Mbps</p> <p><i>802.11g:</i> 14 dBm@54Mbps</p> <p><i>802.11n:</i> 20MHz: 14 dBm@MCS7 40MHz: 12 dBm@MCS7</p>
Receiver Sensitivity	<p><i>802.11b:</i> -84 dBm@11Mbps</p> <p><i>802.11g:</i> -71 dBm@54Mbps</p> <p><i>802.11n:</i> 20MHz -70 dBm@MCS7 40MHz -67 dBm@MCS7</p>

Security	WPA, WPA2, WPS, WEP 64b&128bit, IEEE 802.1X, IEEE 802.11i
Operating Voltage	3.3V ± 5% I/O supply voltage
OS Supported	Microsoft Windows Win7/Win8; Linux based
Power Consumption	<i>TX Mode:</i> 802.11b 11Mbps : 285 mA 802.11g 54Mbps : 205mA 802.11n HT20 MCS7: 200mA 802.11n HT40 MCS7 : 185mA <i>RX Mode:</i> 148 mA <i>Idle Mode:</i> 130 mA
Antenna Type	Metal Antenna

FCC Statement:

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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

LABEL OF THE END PRODUCT:

The final end product must be labeled in a visible area with the following "Contains TX
FCC ID: MDZ-WN4631R

The OEM integrator is still responsible for the FCC compliance requirement of the end product, which integrates this module.

Appropriate measurements (e.g. 15 B compliance) and if applicable additional equipment authorizations (e.g. Verification, Doc) of the host device to be addressed by the integrator/manufacturer.

IMPORTANT NOTE:**FCC Radiation Exposure Statement:**

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and consider removing the no-collocation statement.