

# 900Mbps Dual Band Wireless USB Adapter

## 802.11 a/b/g/n/ac/ax+Free driver+BT5.3

**Model: WD-AX906**



### KEY FEATURES

- 900Mbps wireless transmission rate
- Dual band frequency 2.4GHz & 5.8GHz
- Provides two methods of operation: Infrastructure and Ad-Hoc
- Free driver, no need CD or download the driver online
- Supports 64/128-bit WEP, complies with 128 bit WPA standard(TKIP/AES), supports MIC, IV Expansion, Shared Key Authentication, IEEE 802.1X
- Supports Windows
- win10/ win11
- Seamlessly compatible with 802.11 a/b/g/n /ac /ax devices
- With Bluetooth 5.3

## Specifications

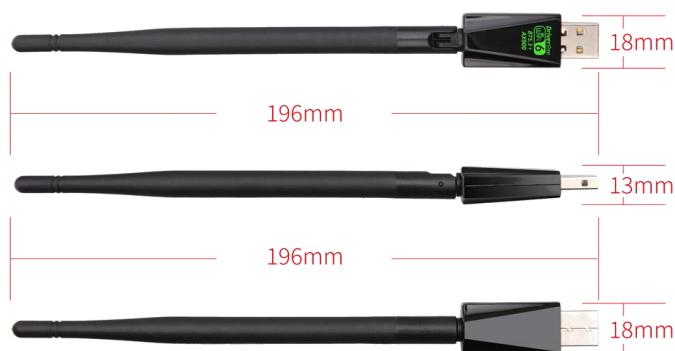
|                          |                                                                              |                 |
|--------------------------|------------------------------------------------------------------------------|-----------------|
| Chipset                  | Realtek RTL8851BU                                                            |                 |
| Interface                | USB2.0 Hi-Speed connector                                                    | + Bluetooth 5.3 |
| Wireless Speed           | 2.4G: Up to 286Mbps    5.8G : Up to 600Mbps                                  |                 |
| Frequency Range          | 2.4GHz & 5.8GHz                                                              |                 |
| Wireless Transmit Power  | 20dBm(MAX EIRP)                                                              |                 |
| Modulation Technique     | OFDM/CCK/16-QAM/64-QAM/1024-QAM                                              |                 |
| Work Mod                 | Ad-Hoc / Infrastructure                                                      |                 |
| Wireless Security        | 64/128 bits WEP, WPA/WPA2, WPA-PSK/WPA2-PSK (TKIP/AES)/WPA3                  |                 |
| Temperature Range        | Operating: -0°C to 70°C,    Storage: -40°C to 90°C                           |                 |
| Humidity                 | Operating: 5% to 95% (non-condensing),    Storage: Max. 90% (non-condensing) |                 |
| Support Operating System | Win10 / Win11                                                                |                 |
| Dimensions (H x W x D)   | 196x 18x13mm                                                                 |                 |

## RF Performance Table for 2.4GHz and 5.8GHz

|          | Data Rate | TX Power | Tolerance |
|----------|-----------|----------|-----------|
| 2.4GHz   | 1Mbps     | 13.5dBm  | ±1dB      |
| 802.11b  | 11Mbps    | 13dBm    | ±1dB      |
| 2.4GHz   | 6Mbps     | 12dBm    | ±1dB      |
| 802.11g  | 54Mbps    | 11dBm    | ±1dB      |
| 2.4GHz   | MCS0      | 13dBm    | ±1dB      |
| 802.11n  | MCS7      | 12dBm    | ±1dB      |
| 20MHz    | MCS8      | 12dBm    | ±1dB      |
| 2.4GHz   | MCS0      | 13dBm    | ±1dB      |
| 802.11n  | MCS9      | 12dBm    | ±1dB      |
| 40MHz    | MCS9      | 12dBm    | ±1dB      |
| 2.4GHz   | MCS0      | 13.5dBm  | ±1dB      |
| 802.11ax | MCS11     | 12.5dBm  | ±1dB      |
| 80MHz    | MCS11     | 12.5dBm  | ±1dB      |
| 5.8GHz   | MCS0      | 12.5dBm  | ±1dB      |
| 11a      | MCS11     | 12.5dBm  | ±1dB      |
| 5.8GHz   | MCS0      | 12.5dBm  | ±1dB      |
| 11ax     | MCS11     | 12.5dBm  | ±1dB      |
| 80MHz    | MCS11     | 12.5dBm  | ±1dB      |

|         | Data Rate | RX Specifications Sensitivity | Tolerance |
|---------|-----------|-------------------------------|-----------|
| 2.4GHz  | 1Mbps     | -97dBm                        | ±2dB      |
| 802.11b | 11Mbps    | -90dBm                        | ±2dB      |
| 2.4GHz  | 6Mbps     | -92dBm                        | ±2dB      |
| 802.11g | 54Mbps    | -76dBm                        | ±2dB      |
| 2.4GHz  | MCS0      | -92dBm                        | ±2dB      |
| 802.11n | MCS7      | -75dBm                        | ±2dB      |
| 20MHz   | MCS8      | -71dBm                        | ±2dB      |
| 2.4GHz  | MCS0      | -89dBm                        | ±2dB      |
| 802.11n | MCS9      | -67dBm                        | ±2dB      |
| 40MHz   | MCS9      | -67dBm                        | ±2dB      |
| 5.8GHz  | 6Mbps     | -94dBm                        | ±2dB      |
| 11a     | 54Mbps    | -78dBm                        | ±2dB      |
| 5.8GHz  | MCS0      | -89dBm                        | ±2dB      |
| 11ac    | MCS       | -64dBm                        | ±2dB      |
| 80MHz   | MCS       | -64dBm                        | ±2dB      |
| 5.8GHz  | MCS0      | -82dBm                        | ±2dB      |
| 11ax    | MCS0      | -82dBm                        | ±2dB      |
| 80MHz   | MCS11     | -54dBm                        | ±2dB      |

## Dimensional Drawing



## FCC 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 harm full 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your 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.

Specific Absorption Rate (SAR) information:

This Device 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: Device has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the device kept 5mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain an 5mm separation distance between the user's body and the back of the device. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.