

Universal WLAN-ac / Bluetooth Combo Kit with M.2 card

The Shuttle XPC Accessory WLN-M is a wireless LAN kit consisting of a M.2-2230 card, two antennas and appropriate cables. The WLN-M is intended for certain Shuttle barebones of the XPC cube and XPC slim series to equip them with the wireless LAN standard according to IEEE 802.11n/ac at 2.4 / 5 GHz. At the same time, his combo device also supports Bluetooth 4.2.

Shuttle Accessory WLN-M WLAN kit



Images for illustration purposes only.



Shuttle XPC slim and XPC cube with WLN-M installed



Feature Highlights

Contents	<ul style="list-style-type: none"> • M.2-2230 (NGFF) WLAN card • 2 antenna cables for XPCs slim (21 & 29 cm) 2 antenna cables for XPCs cube (53 cm) Connectors: I-PEX4 / MHF4 and RP-SMA male • 2 dipole antennas (2.4 / 5 GHz band, 108 mm) • Quick Guide (English, German, French) • Windows driver DVD
Compatibility	<p>Compatible with the following Shuttle products:</p> <ul style="list-style-type: none"> • Shuttle XPC nano Barebone PCs: NC02U series, NC03U series, NC10U series • Shuttle XPC slim Barebone PCs: DH110(SE), DH270, DH310(S), DH310V2, DH370, DH410(S), DH470, DH610(S), DH670, XH110(V), XH110G, XH270, XH310(V), XH310R(V), XH410G, XH510G(2), XH610(V), XC60J, DX30, DL10J, DL20N(6), DH02Ux • Shuttle XPC cube Barebone PCs: SH110R4, SZ170R8V2, SZ270R8, SZ270R9, SH310R4(V2), SH370R6(V2)(Plus), SH370R8, SH510R4, SH570R6 (Plus), SH570R8, SW580R8 • Shuttle XPC All-in-One Barebone PCs: P20U, P22U, P51U(3), P52U(3), X50V7xx, X50V8xx • Shuttle Edge: EN01J3, EN01J4, EN01E, EN01B (in combination with Shuttle Accessory LN007)
OS Support	<p>Supports Windows 7, 8.1, 10, 11, Linux</p>
Adapter card	<ul style="list-style-type: none"> • Model: AzureWave AW-CB304NF • Chipset: Realtek RTL8821CE • Format: M.2-2230 (NGFF) card • Supports WLAN IEEE 802.11b/g/n/ac, 2.4 / 5 GHz band, 1T1R • Maximum PHY data rate: 72.2 / 150 Mbps using 20 / 40 MHz bandwidth in n-mode and 433.3 Mbps using 80 MHz bandwidth in ac-mode • Supports WPA2 (with AES) and WPA encryption • Supports Bluetooth 4.2, 2.4 GHz band • Operating temperature: 0~70°C

Note: What are the advantages of WLN-M over a conventional WLAN USB stick?

- 1) The M.2 card sits in the case and is better protected from tampering and theft.
- 2) The integrated solution is more appealing.
- 3) For the best possible efficiency the antenna should be at least 6cm long (half a wavelength at 2.4 GHz) which is a big advantage over the USB stick.
- 4) This WLAN card is a Combo card which supports both WLAN and Bluetooth.
- 5) The transmission protocol of the PCI-Express interface is less complex as compared to USB which helps keep processor load lower.

Quick Installation Guide

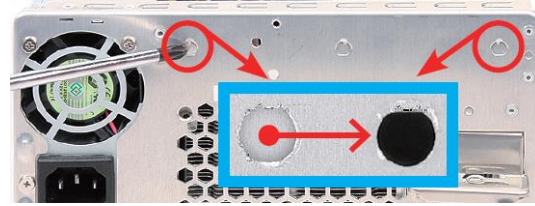
Please install with reference to the following Steps.

Due to safety reasons, please turn off your computer completely first and unplug it from the power supply.

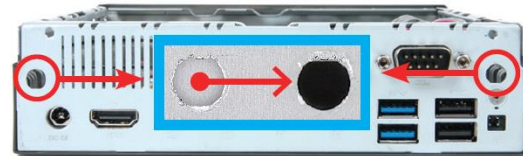
1. Unfasten two screws on the back panel and remove the cover.
2. Use a 6mm screwdriver to puncture the perforated hole on the back panel from the outside in. Once the screwdriver passes through the perforation, carefully remove the metal tag.

If the metal tag still does not detach, carefully bend it by pushing down from the inside of the chassis.

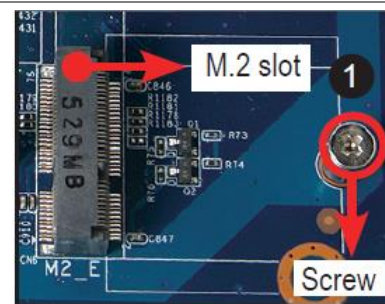
for XPC cube series:



for XPC slim series:

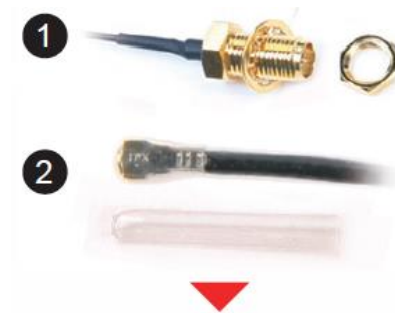


3. Take the wireless kit out of its box.
4. As shown, unfasten the screw first. Install the M.2 card into the M.2 slot and affix it with a screw.



5. Take out the two antenna cable connectors and remove the locks and protective sleeves. Then connect them to the M.2 card.

Attention: the small MHF IV (I-PEX4) connectors for the antenna cables on the WLAN adapter can easily be damaged. It is recommended to work with a magnifying glass and good lighting.

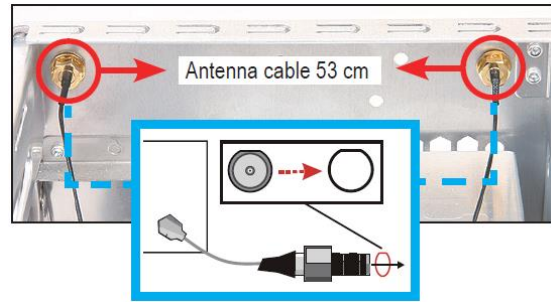


6. Install the antenna cable connectors through the appropriate opening at the back of the chassis.

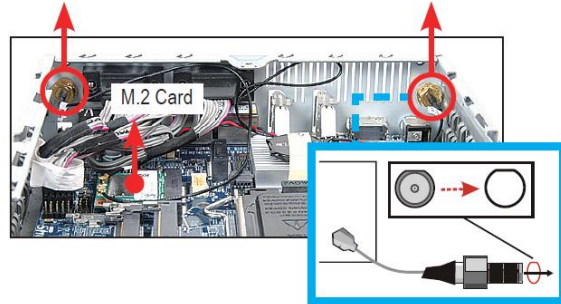
When leading the cable connector through the opening, check the socket alignment and only push horizontally. DO NOT turn or twist the cable.

Should any difficulties occur, make sure the surface is clean. Finally, check the alignment again and carefully apply more force.

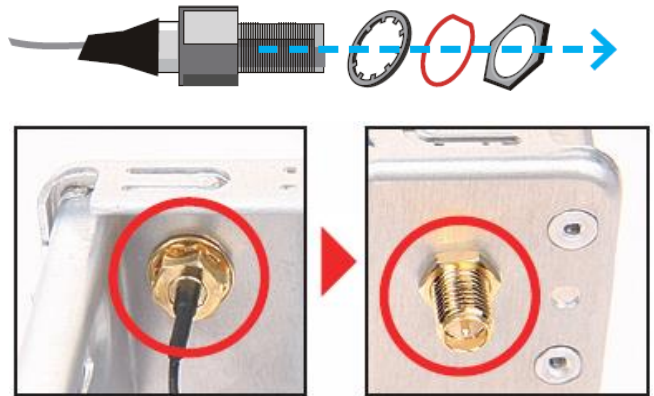
for XPC cube series:



for XPC slim series:



7. Use the lock to affix the antenna from the outside.



8. Replace the case cover and fasten its screws.

9. Screw the antenna into position as pictured. Make sure it is aligned vertically to achieve the best possible signal reception.

Make sure the two antennas are aligned in the correct direction.

