# Expansion kit with 4G modem module and two antennas

this accessory kit you can equip a compatible Shuttle XPC with a builtin 4G network function. This kit includes a 4G modem module, an M.2 adapter card and two antennas with cables. All you need is an activated Nano SIM card. Please note that the M.2-2230 slot is used for this purpose and any existing WLAN cards must first be removed from the PC.

# **Feature Highlights**

Contents	<ul> <li>4G modem-module</li> <li>M.2 adapter card (LN004)</li> <li>Fastening screw for 4G modem module (two-parts)</li> <li>2x external 4G antennas</li> <li>2x antenna cables with toothed lock washer and screw nut</li> <li>Quick installation guide</li> </ul>
4G modem module	<ul> <li>Model: Huawei ME906s-158 (for Europe)</li> <li>Form factor: 30 x 42 x 2.3 mm (HWD), M.2</li> <li>LTE data transfer rate: max. 150/50 Mbps @ 20MHz Bandwidth Cat4</li> <li>Further information see next page.</li> </ul>
M.2 adapter card	<ul> <li>Riser card for the M.2-2230 Key E slot</li> <li>Dimensions: 30 x 30 mm</li> <li>supports one 4G module M.2-3042 Key B</li> <li>supports one SIM card in Nano format</li> </ul>
Two external antennas	<ul> <li>LTE/4G dipole omnidirectional antenna</li> <li>Multi-band: supports EU frequency bands (800, 1800, 2600 MHz) for GSM/UMTS/LTE and the following frequency ranges: 704~960, 1428~1575, 1720~2170, 2400~2690 MHz</li> <li>Colour: black</li> <li>Length overall: 135.7 mm</li> <li>Antenna body: 114.8 mm x 20.1 mm</li> <li>Impedance: 50 Ohm</li> <li>Voltage Standing Wave Ratio: &lt;= 3.0</li> <li>Radiation: Omni, Gain: 2 dBi</li> <li>Polarisation: vertical</li> <li>Connector: SMA</li> </ul>
Two antenna cables	<ul> <li>RF cable lengths: 20 cm</li> <li>Connectors: <ol> <li>SMA Pigtail female</li> <li>I-PEX MHF 4</li> </ol> </li> </ul>
Compatibility	<ul> <li>The WWN11 accessory kit can be used for - Shuttle XPC slim DL10J</li> <li>Note that you also need a Nano SIM card</li> </ul>



# XPC Accessory WWN11 4G Adapter Kit Plus

Shuttle Order No. POE-WWN11



images for illustration only.

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### Specifications: M.2 LTE module Huawei ME906s-158

ME906s-158 is a M.2 interface LTE module with Hisilicon Balong V711 chipset embedded, supporting LTE (FDD) B1/B2/B3/B5/B7/B8/B20/B28, Qual-band DC-HSPA+/HSPA+/HSPA/WCDMA B1/B2/B5/B8 for Europe and APAC network coverage, low power consumption, Global Navigation Satellite System (GNSS), and Europe carrier certifications, enabling easier and more flexible design and integration into end devices.

ME906s-158 is the ideal choice for Notebook, Tablet and Ultrabook etc. All Huawei modules comply with the RoHS directive and Regional certification.



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# Quick Installation Guide for WWN11

#### 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.

Please note that the M.2-2230 slot is used for this purpose and any existing WLAN cards must first be removed from the PC.

3. When installing a nano SIM card, please push the cover to the side and lift it, then carefully insert the SIM card.

4. Please install the 4G/LTE adapter board into the M.2 E-Key slot interface as shown and affix it by tightening the screw with bolt firmly.

5. Please apply the bolt and tighten it firmly.

6. Please install the 4G/LTE module in the daughterboard, then tighten the screw with bolt firmly.

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8. 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.





10. Replace the case cover and fasten its screws.

11. Screw the antennas into position as pictured. Make sure they are aligned vertically to achieve the best possible signal reception.Make sure the two antennas are aligned in the correct direction.

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



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12. Check the following BIOS setting to ensure that the LTE module will be recognized correctly: Advanced – Onboard Device Configuration – E-Key Device Select = USB

Aptio Setup Advanced	Utility – Copyright (C) 2
High Definition Audio	[Enable]
OnBoard 1211 LAN Function	[Enable]
OnBoard LAN Boot ROM	[Disabled]
IGD Memory Size Select	[64MB]
M.2 Device Select	[SATA]
E-KEY Device Select	[PCIE]

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