

## DATASHEET

2.4GHz, Wi-Fi HaLow, GPS, LoRa

# AP7622-WH1

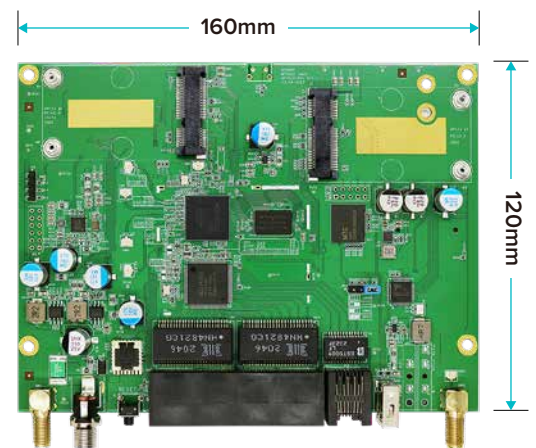
5G/4G LTE Router Board  
 Functions by MT7622 w/2.4GHz



## Description

The AP7622-WH1 is a versatile 5G/4G LTE router board powered by the MediaTek MT7622 chipset, featuring Wi-Fi 2.4GHz, Wi-Fi HaLow, GPS, and LoRaIoT capabilities. It supports Wi-Fi 6 speeds up to 5702 Mbps when equipped with the AW7915 series Wi-Fi modules. And it is also equipped with WiFi Halow module MM610X-001, which supports the construction of Wi-Fi HaLow networks based on the IEEE 802.11ah specification.

OPENWRT firmware is available for integration with Wi-Fi, Wi-Fi HaLow, LoRa WWAN module, and cellular modules, which are sold separately. The board measures 12 × 16 cm and includes a high-performance 1.35GHz ARM® Cortex-A53 MPCore™ CPU, multiple interfaces (UART, I2C, SPI, GPIO), and a variety of connectivity options (SGMII, RGMII, PCIe 2.0, USB 2.0/3.0, 5-port switch). It supports Bluetooth, 802.11n/ac/ax WLAN via PCIe, and prioritizes streaming services with its hardware NAT engine and QoS. Designed for smart Wi-Fi AP routers and home gateways, it's an ideal solution for advanced network applications.



## Features

- Mediatek MT7622 chipset with Interface UART, PWM, MDC, MDIO, JTAG, I2C, SPI, GPIOs and USB(LTE) port.
- Flash SPI NAND Flash 128MB (1Gb), Max 512MB (4Gb)
- DDR3 256MB (2Gb)
- Data Rate up to 5702 Mbps
- SIM card slot
- Security: 64/128-bits WEP, TKIP,WPA, WPA2,AES,WPS
- Multi-modes: MiFi, AP/Client
- 5 Giga LAN ports

### SOFTWARE FEATURE

- Support OPENWRT, MTK SDK
- Network Features:
  - Video, Storage
  - DHCP Client/Relay/Server
  - Dynamic DNS
  - NTP Client
  - DNS Cache/Proxy
  - Firewall
- MAC/IP/Port Filter
- Virtual Server
- DMZ
- Content Filter

**For more detailed information, please contact our sales team: [sales@asiarf.com](mailto:sales@asiarf.com) / +886 2 2940 7880**





## 2.4GHz, Wi-Fi HaLow, GPS, LoRa AP7622-WH1 5G/4G LTE Router Board



MT7915 Wi-Fi 6 Modules supports 4x4 5GHz reach 2401Mbps.  
With 2 x MT7915 modules is to be 3 bands backbone mesh router.

### Hardware Features:

<b>Wi-Fi</b>	IEEE 802.11 a/b/g/n/ac standards compliant 4T4R 2.4GHz 900Mbps, 2x5GHz modules is 4802Mbps
<b>Wi-Fi HaLow</b>	IEEE802.11ah standards compliant 1T1R Sub-1GHz 20Mbps
<b>BT</b>	BT4.2/BLE5.0 integrated
<b>4G/5G</b>	Compatible with M.2 card
<b>Memory</b>	SPI Flash SOP8 128MB DDR3 256MB 16bits BUS
<b>Interface</b>	2 x mini PCIe slots 1x M.2 slot (USB 3.0) 5 x Giga Ethernet Ports 1 x Micro SD-XC 1x USB-A 2.0 1x Wi-Fi HaLow module (MM610X-001) 1 x GPS (Quectel L70B) 1x 12C 1 x SPI 1xSIM Card slot GPIOs
<b>Dimension</b>	120 x 160 x 30 mm
<b>Certifications</b>	FCC/CF, IC by request
<b>Power</b>	DC Power Jack from 12v Barrel D=2.0mm (or 2 pins)

### Additional information:

<b>Weight</b>	0.2 kg
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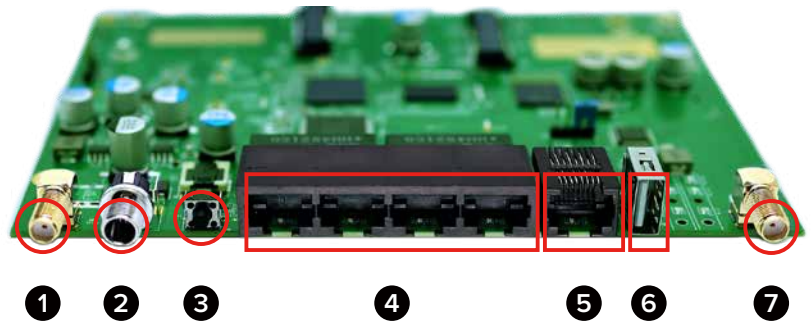


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## AP7622 IO Side

- ❶ SMA for GPS
- ❷ Power
- ❸ Reset
- ❹ LAN
- ❺ WAN
- ❻ USB-A Femal
- ❼ SMA for 4G/5G WWAN



## AP7622 Interface

This slot can accommodate an **AW7916** or **AW7615** series module.

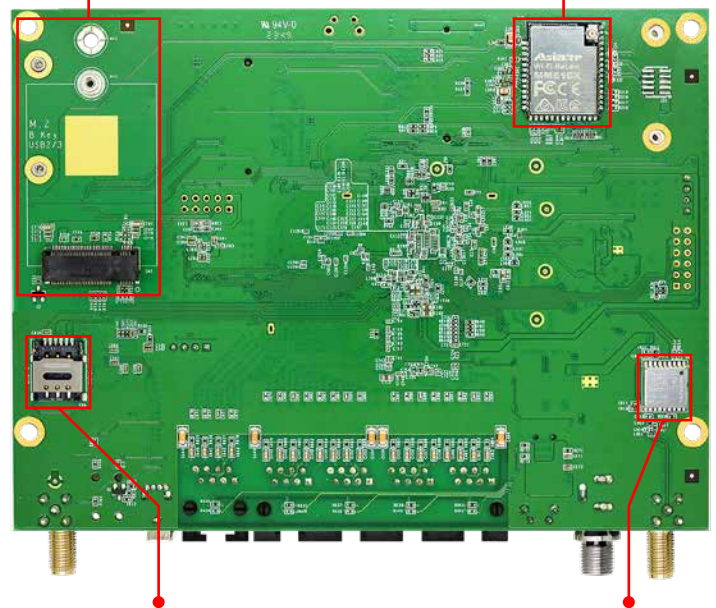
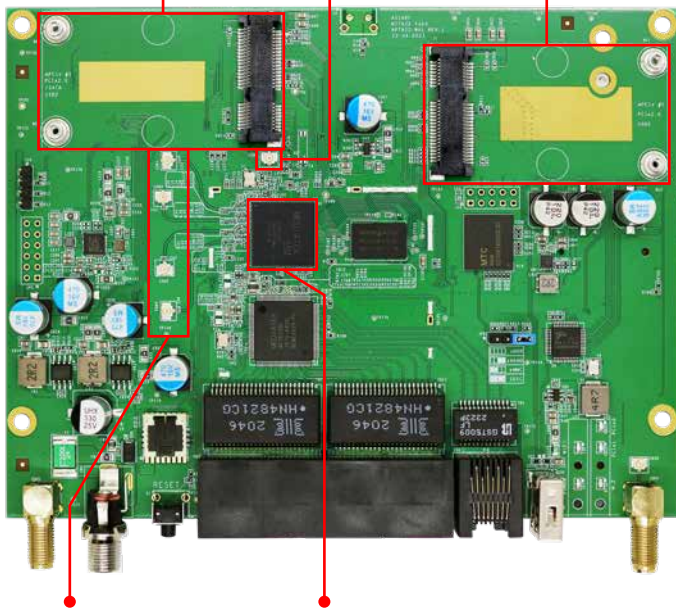
This slot can accommodate an **AW7916** or **AW7915** series module.

**NOTE:** The default setting complies with the use of a 4G module. If you wish to install a 5G module on this platform, please inform us first, and we will adjust the lock hole position for you.

I-PEX Conn. for BT

This slot is accommodated an **4G** or **5G** Module.

**Wi-Fi HaLow** Module embedded.



**2.4GHz**  
I-PEX

MEDIATEK MT7622 supports **802.11n (2.4GHz)** and **Bluetooth** connectivity.

SIM Card slot

**GPS** Module embedded.