



## Key Benefits

- ✓ Cost effective & compact design with built-in high gain LTE and WiFi antenna
- ✓ Full compliance to 3GPP Release 12 LTE CAT12 specifications
- ✓ Advanced 4x4 MIMO and CA support
- ✓ Dual GE LAN ports, SIP 2.0 VoIP and 802.11b/g/n/ac MIMO WiFi support
- ✓ Router, bridge and by-pass networking, IPv4 & v6 and Multiple PDN support
- ✓ Built-in VPN and L2/L3 GRE client support
- ✓ FTP, HTTP and TR-069 management support
- ✓ SIM card authentication and virtual SIM support



**JATONTEC 8500M** is a highly advanced CAT12 LTE outdoor multi-service product solution specifically designed to meet integrated data, voice and Wi-Fi access needs for residential, business and enterprise users. The product consists of an outdoor data CPE unit (ODU) and an indoor multiservice gateway unit (Router) that supports advanced networking, VoIP gateway and WLAN AP functionalities. It enables wide service coverage and provides high data throughput and networking features to customers who needs easy broadband access, low cost VoIP service and Wi-Fi connectivity.

## RELIABLE PERFORMANCE

The JT8500M CPE provides 3GPP standard implementation of LTE Release 12 specification. With the built-in 4x4 MIMO high gain ODU antenna, it enables a longer reception range from eNodeB base station. This help yields more efficient use of network with a larger cell reach, carrier class service, and more customer service probability.

The Router unit has two Gigabit LAN and one RJ11 ports, built-in 2x2 MIMO high performance 802.11b/g/n/ac WiFi and software firewall for security, providing an effective all-in-one solution to SOHO or residential customers. It can provide up to 230Mbps max data throughput which can be very competitive to wired broadband access service.

## EASY USAGE & MANAGEMENT

JT8500M is a user-friendly and easy to setup LTE CPE. The ODU can be powered by the 48V PoE via the Router WAN port. The LEDs on the JT8500M have also been designed for user convenience, and offer a clear sign of what the device is doing. The compact design is well suited for enterprise and residential user.

The JT8500M offers rich management features which facilitate the task of service provider. It supports local management access, Telnet, WEB, and centralized remote OTA configuration, upgrades management and device monitoring via standard TR-069 ACS systems.

## TECHNICAL FEATURES

JT8500M is fully compliant to the LTE Release 11 specification. It offers standard support for advanced 4G features such as MIMO and AMC to maximize the system capacity and bandwidth throughput. The use of 4G modulation enhances performance in non-line-of-sight conditions to ensure immunity to interference and multi-path conflicts typical of deployments in urban areas. Sophisticated QoS capabilities ensure true end-to-end QoS and support for high quality data services. JT8500M has enhanced router function and VPN clients support to enable greater service selection and reliability.

## PHYSICAL & ENVIRONMENTAL

**Power DC** : 48V/0.5A DC (ODU PoE)

**Power Consumption** : <20W

**Weight** : <2Kg (ODU), <300g (Router)

**Dimensions** : 250mm \* 250mm\* 75mm(ODU)  
135mm x 105mm x30mm (Router)

**Environment** : Operating Temperature, -40℃~55℃.  
Storage Temperature-30℃ -85℃,  
Humidity, 95% max Non-condensing

**LTE Radio Interface**

- Radio Access : 3GPP Release 13, Category 12
- Operation Mode : TDD, 4Rx, 2Tx, 4x4 MIMO & CA
- CA : DL 2CA (4x4 MIMO 64 QAM);  
DL 4CA (2x2 MIMO 256QAM);UL 2CA(64QAM)
- MIMO : DL 2x2 MIMO (4CA);DL 4x4 MIMO(2CA);  
UL 2x2 MIMO
- Frequency Band : B42,B43,B48
- Output Power : 23dBm per Tx
- Antenna Gain : 13dBi
- LED Indicators:Power, System, ETH, SIM, RF(4)
- SIM Support:SIM card slot

**WiFi Interface (Router)**

- Radio Access:802.11b/g/n/ac
- Output Power:16±1 dBm
- Antenna:3-4dBi built-in antenna
- Security:64/128 bit WEP, WPA/WPA2

## Technical Specifications

**USER INTERFACE**

- ODU PoE Interface:** 1 RJ45 10/100/1000M ETH
- LAN Data Interface:** 2 RJ45 10/100/1000M ETH
- Voice Line Interface:** 1 RJ11/FXS Line
- Router LED Indicator :** SYS, NET, WAN, 2.4G WiFi, 5GHz WiFi, WAN, LAN 1-2, LINE, WPS

**Network configuration:**

- DHCP or Static IP address Assignment
- Bridge and Router Operation Support
- Built-in DHCP Server for LAN Devices
- IPv4, IPv6 DS-Lite Support
- Multiple PDN interface support
- NTP Service Support

**Data Networking Features:**

- VPN Pass-through support (PPTP, L2TPV3 & IPsec)
- Built-in L2TP&GRE L2/L3 Tunneling Client
- Firewall & Access Control
- DMZ and Virtual Server Support
- IP and Port Filtering Support
- Local and Remote Management Restriction
- Application Firewall Support
- LAN Device Access Control

**VoIP Processing**

- Compression:G.711 G.721 G.723 G.726 G.729 G.722

- Comfort Noise: Comfort noise generation & control
- Echo Cancellation:G.165/168-2000
- Silence Handling: Silence detection/suppression
- Fax Support:T.30 and T.38
- Delay/Jitter/Loss: Jitter and packet loss compensation
- DTMF Relay: In band DTMF, RFC2833, SIP signal
- Call Duration: 24+ hours Uninterrupted Call

**Voice Services**

- Basic Voices: Local, domestic & international calling
- Flexible dial plan configuration support
- Tone customization for different countries
- Complementary Services: Caller ID, Caller ID suppression, Call Screening, Speed dial, Call Tracing, Hotline, Unconditional call forwarding, Call Forwarding No Answer, Call Forwarding on Busy, Call Waiting, Call Back, Call Blocking, No Disturbance, Alarm, Network and Local 3-way Call, Data Call, and etc.

**Device Management**

- CLI, Telnet and WEB Management Interfaces
- Standard TR-069 Management
- Device Factory Default Setting

**Industry Standards**

- ITU: 3GPP E-UTRA Release 10
- IETF:IP voice SIP v2.0
- Water Resistance: IP67