JATONTEC 8500D is a most advanced TDD LTE-A Pro CAT15 outdoor data unit specially designed to meet the most challenging demands of today's high speed wireless backhaul and fixed wireless access deployments by the 4G service operators. The unit can support multiple TDD band operations. Multiple operator network support can also be provisioned on the unit to allow the deployment across entire country with different operators..

JT8500D provides Gigabit PoE connection to connect user terminal device such as indoor router or Wi-Fi AP products. The unit PoE interface can also work with standard PoE switches or router products. The product comes with PoE power adapter and mounting bracket accessories for quick self-installation.

RELIABLE PERFORMANCE

JT8500D is designed to meet the stringent operation environment for outdoor CPE devices. The device can safely operate in a wide temperature ranging from -40 to +55 degree and meets industrial IP67 water and dust proof standard requirements. The device MTBF time is expected to be above 80,000 hours. Depending on the network configuration and DL/UL split ratio configuration, the unit can provide up to 580 Mbps TDD max throughput over the air. The typical coverage should be more than 15km with reasonable good throughput performance.
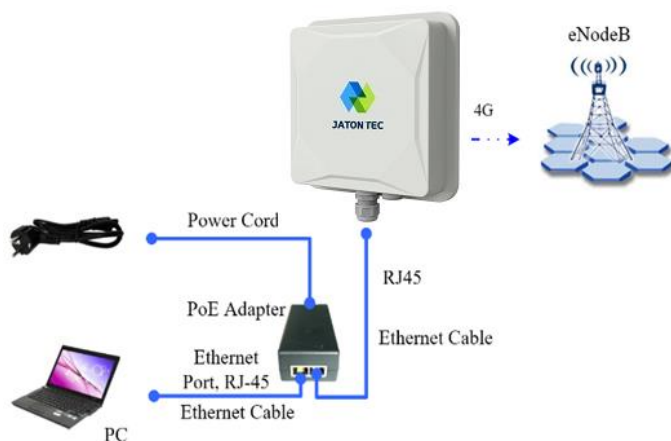
EASY USAGE & MANAGEMENT

JT8500D is a user-friendly LTE CPE that is easy to install and maintain. The unit is fully integrated and comes with all the necessary device drivers pre-loaded. Subscribers just connect the device to their computer or home switch/router and the device is ready to offer an experience of surfing over Internet. The LEDs on the JT8500D have also been designed for user convenience, and offer a clear sign of what the device is doing. The IP addresses can be dynamically obtained via DHCP.

JT8500D offers rich management features which facilitate the task of carrier. It supports local management access, Telnet, Http, Https and standard TR069 remote OTA management including device configuration, monitoring, and upgrades management.

TECHNICAL FEATURES

JT8500D design is based on the standard implementation of LTE release 11 specification. It is able to meet the most demanding requirements of large service providers with high throughput and availability. JT8500D is a CAT15 CPE and supports advance features such as 4x4 MIMO and Carrier Aggregation, QAM256 modulation on the uplink.

With high gain directional patch antenna, JT8500D enables a longer reception range from the base station. This yields more efficient use of the network with a larger cell reach, guaranteed carrier class service, and customer service probability. Advanced Orthogonal Frequency Division Multiplexing (OFDM) modulation enhances performance in non-line-of-sight (NLOS) conditions to ensure immunity to interference and multi-path conflicts typical of deployments in densely populated urban areas. Moreover, sophisticated QoS capabilities ensure true end-to-end QoS and support high quality data services.

Key Benefits

- ✓ Cost effective & compact design with built-in high gain LTE antenna

- ✓ Compliant to 3GPP Release 12 standards

- ✓ 2T4R Radio Design

- ✓ Advanced 4x4 MIMO & 4CA (2CC & 4CC) support and CAT15 data throughput

- ✓ Router and bridge operation mode support

- ✓ IPv4 & IPv6 and Multiple PDN support

- ✓ PPT, L2TPV3, SNMP and GRE VPN Tunneling clients support

- ✓ FTP, HTTP and TR-069 management support

- ✓ 48V Gigabit PoE Power

LTE Radio Interface

- **Radio Access : 3GPP Release 12, Category 15**
- **Operation Mode : 4Rx, 2Tx, DL 4*4 MIMO**
- **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 : B42/43/48**
- **Output Power : 23dBm per Tx**
- **Antenna Gain : 13dBi (4 antenna model)**
                       17dBi (2 antenna model)

Technical Specifications

CONFIGURATIONS & MANAGEMENT

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
SIM card locking feature
Network selection and cell locking provision

Data Networking Features:
VPN Pass-through support (PPTP, L2TPV3 & IPsec)
Built-in L2TP & GRE Tunneling Clients
L2 VPN networking support
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

Device Management
CLI, Telnet, HTTP and HTTPS Interfaces
Standard Based TR-069 Management
FTP and HTTP OTA Firmware Upgrade
USIM and Network PLMN Locking Support
Device Factory Default Setting

PHYSICAL & ENVIRONMENTAL

Power DC : 48V/0.5A (Gigabit PoE)
Power Consumption : <15W
Weight :   <2.5Kg
Dimensions : 250mm (L) * 250mm(W) * 75mm(D)
Environment : Operating Temperature, -40℃~55℃.
                    Humidity, 95% max Non-condensing

USER INTERFACE

Data Interface : 1 RJ45 10/100/1000M ETH Port
LED Indicator : PWR, SYS, NET, SIM, ETH,
                    RF (5 Signal intensity LEDs)
SIM Card :   Single SIM card slot (2FF)

Industry Standards

ITU : 3GPP Release 11
IEEE : IEEE 802.3   10Base Ethernet
        IEEE 802.3u   Fast Ethernet
        IEEE 802.3ab   Gigabit Ethernet
OTHERS : Water Resistance : IP67
          Safety : FCC or CE

JATON TEC