ZyXEL

Ultimate WiMAX MIMO Technology for Ultimate Mobility

Benefits

- IEEE802.16e-2005 Standard-based (TDD SOFDMA)
- WiMAX Forum Wave2
- Integrated Secure Voice Data in a Compact, Creative Stylish Design
- MIMO Matrix A and Matrix B Support
- 2.5GHz Frequency Band Support
- Up to 27dBm Transmission Power and Superior Reception Performance
- Embedded Antenna & Flexible External Antennas
- Five Classes of QoS Support
- Over-the-air Software Upgrade

Maximum Freedom of Mobility

The ZyXEL MAX-206M2 WiMAX MIMO VoIP Router provide users with seamless broadband wireless connectivity and the freedom to surf the Internet and access any information at home, in the office or anywhere under WiMAX coverage.

Ultimate Wireless Broadband Technology

ZyXEL's MIMO products support stat-of-the-art Matrix A and Matrix B modes with an aggregate throughput up to 30Mbps.

Software Upgrade Over the Air

Through the WiMAX radio interface, the MAX-206M2 support OMA-DM or TR-069 fully configurable and software upgradeable through events triggered by the operators.

Built-in Embedded Antenna & Flexible External Antennas

In addition to the integrated antennas, the ZyXEL MAX-206M2 VoIP Router also be fitted with flexible external antenna systems that enable users to attach higher-gain antennas easily for specific needs. .

SIP-Based VoIP Communication

The MAX-206M2 CPE Series support SIP (RFC3261)-based VoIP signaling suitable for IP telephony service deployments, while sophisticated voice compression and QoS mechanisms provide toll-quality voice communications.

Advanced IP Networking Features

The MAX-206M2 support advanced IP networking functionalities, including all Secure NAT Router features needed to access the Internet safely.

Easy Deployment

Without operator assistance, the MAX-206M2 can be easily installed by end users; and the rich LED bars showing the WiMAX radio signal strength can facilitate the antenna adjustment as well.

WiMAX MIMO VoIP Router

MAX-206M2

Specifications

WiMAX Air Interface

- Reference standard: IEEE 802.16e-2005 SOFDMA
- Duplex mode: TDD
- Frequency: 2.500-2.700GHz
- Channel Bandwidth / FFT size: 5MHz / 512FFT, 7MHz/1024 FFT and 10MHz/1024FFT
- Modulation: QPSK, 16QAM, 64QAM
- FEC: CC (Convolutional Coding), CTC (Convolutional Turbo Code)
- Maximum ratio combining support
- Maximum output power at antenna port: 27dBm ±1dB
- Built-in antennas : 5dBi Omni x 2
- Sensitivity: -99dBm @ QPSK 1/2
- Two SMA antenna connectors for external antenna
- Aggregate throughput Up to 30 Mbps
- QoS management based on classification
- Security: EAP-TTLS/CHAP-based user authentication, CMAC message authentication, CCM mode 128-bit AES data ciphering

IP Networking

- User configurable Router (RIPv1, RIPv2) and NAT (one-to-one, many-to-one)
- Embedded security: Firewall with SPI, content filtering, Java/Active X/ Cookie/ Keyword blocking
- Major ALG (SIP/FTP/H.323)
- DHCP client/server/relay

Voice over IP

- SIP V2 (RFC 3261) and SDP (RFC 2327)
- G.711 a/µ G.723 and G.729 codec
- Echo cancellation G.168
- VAD (Voice Activity Detection), Silence suppression and CNG (Comfort Noise Generation)
- DTMF Detection and Generation
- Fax, Modem Detection and Pass-through (T.38)

Phone Features

- Caller ID and Message Waiting Indicator (RFC 3842)
- Call Waiting, Call Hold, Call Forward (Unconditional/Busy/No Answer) and Call transfer (Blind and Attended Transfer)
- Early Media, Music on Hold
- MWI (Message Waiting Indicator (RFC 3842)

NAT Traversal

- STUN (RFC 3489)
- Outbound Proxy
- Manual configuration SIP and RTP

Management

- Remote TFTP/HTTP Firmware Upgrade
- Web-based/SNMP/Telnet Management Over-the-air firmware upgrade: OMA-DM or TR-069, Auto Provision

Hardware Specifications

- 2 Ethernet connector: 10/100 BaseT Auto MDI/MDIX (RJ-45 plug)
- 2 FXS POTS phone port for conventional phone (RJ-11 plug)
- LEDs : Power indication, WiMAX connection, status, LAN status, VoIP status LED
- Reset to Factory Defaults/Reboot button

Power Specification

- External power supply: 12V DC
- Average power consumption peak: 24W

Physical Specifications
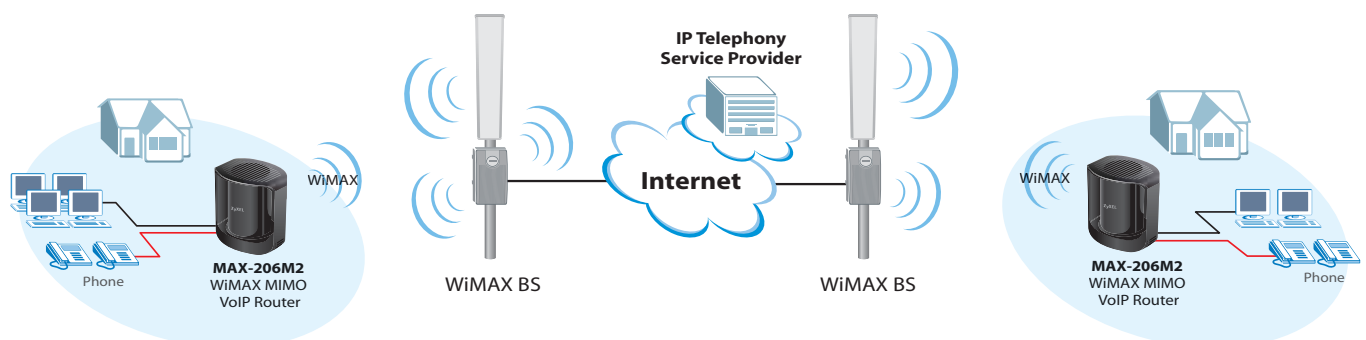
- Dimension: 160(W) x118(D) x167(H) mm
- Weight: 480 g

Environmental Specifications

- Operation Temperature: $0^oC \sim 45^oC$
- Operation Humidity : 10% ~ 90% (non-condensing)
- Storage Temperature: $-25^oC \sim 55^oC$
- Storage Humidity: 10% ~ 95% (non-condensing)

Certification

WiMAX Forum Wave2 certification

FCC certification marked for EMC and Safety

- WEEE Eco directive 2002/95/EC

Application Diagram

For more product information, visit us on the web at www.ZyXEL.com

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