

USB Adaptors for Mobile WiMAX

The PacketMAX® 600 series USB Modem is a simple device to turn any laptop or desktop with a standard USB port into a high-speed WiMAX subscriber station.



PacketMAX 600

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The PacketMAX® 600 series USB Adaptor is a proud addition to Aperto's family of customer premises equipment (CPE) designed specifically for the mobile WiMAX user. Supporting Wave 2.0 feature-set, the IEEE 802.16e-2005 compliant device breaks the last-mile chain, letting the user experience high-speed broadband whether indoor, on campus or on the road. Operators deploying the PacketMAX 600 will enjoy the increased revenue opportunities created by a community of mobile voice and data users that put premium on ease-of-use and value-added services.

Aperto offers PacketMAX 600 models operating in multiple frequencies in 2 GHz and 3 GHz bands. The system is outfitted with link management algorithms, OFDMA, Maximal Ratio Combining (MRC) at the receiver and uplink sub-channelization to ensure optimum link reliability independent of orientation, interior walls and direct line of sight to the base station. Designed for convenience and performance, PacketMAX 600 has dual 2dBi antenna, powerful radio features and advanced QoS to enable hassle-free NLOS operation. The PacketMAX 600 series is a rugged and feature-rich WiMAX-driven subscriber unit, resulting from Aperto's years of cutting-edge research and field-proven technical expertise. Based on WiMAX Forum Certified™ PacketMAX Solutions Architecture (PSA), it has support for popular operating systems and is Windows Vista™ compatible. The users plug it into a USB port and start receiving WiMAX signals within minutes.

PacketMAX Ecosystem CSN works with this mobile station within WiMAX Forum NWG recommended architecture for Authentication, Provisioning and Billing. Operators have the choice of user-friendly web-based portals for auto-provisioning, LED feedback for power/data status and sleep/ idle mode support to conserve battery. Aperto deploys all WiMAX QoS classes, including UGS. This not only allows bandwidth guarantee for differentiated service plans but also drive voice revenue over the WiMAX link. Mobile IP support in PacketMAX 600 gives users location-independent access to all their data and multimedia content.

KEY FEATURES

- IEEE 802.16e-2005 compliant
- High Power Radio; MIMO antenna
- Consumer self-installable, auto-provisioning, auto-connect
- Superior QoS for triple-play
- Multiple antenna for error-free indoor performance
- Provisioning and billing using ApertoWiSE CSN-based AAA
- Windows™ Vista, XP2 ready

Typical Applications

- QoS enabled tiered voice, video and data
- Ability to access next generation, multimedia-rich Internet content on portable devices
- Reliable, real-time and high speed connections to central office servers from branch office or travelling executives



PacketMAX 600 System Specifications

Radio and System Specifications

Compliance	: IEEE 802.16e-2005 Wave 2.0
Duplex Mode	: TDD
RF PHY	: SOFDMA 512, 1024 FFT
Frequency	: 2.3 to 2.4 GHz, 2.5 to 2.7 GHz and 3.3 to 3.8 GHz
Channel Bandwidth	: 5 MHz, 7 MHz, 10 MHz
Radio Output Power	: up to 23 dBm
Integrated Antenna Gain	: 2 X 2dBi
External Antenna Option	: Yes
Modulation	: QPSK, 16QAM, 64QAM
Coding Rate	: 1/2, 2/3, 3/4, 5/6
Antenna Diversity	: MIMO Matrix A, MIMO Matrix B, MRC
Link Enhancement Features	: Sub-channelization, H-ARQ

Software Features

Quality of Service	: QoS Service flows and congestion management
Power Management	: Sleep Mode and Idle Mode support
Encryption	: EAP/TLS CHAP user authentication, CMAC message authentication
Upgradeability	: Firmware upgrade
Operating Systems support	: Windows XP SP2, Windows Vista

Physical Specifications

LED	: Data link, power
Form Factors	: USB
IO Interface	: USB 2.0
Power Consumption (Max)	: < 2.5W

■ ■ About Aperto Networks

Aperto Networks helps leading service providers deliver affordable wireless voice and broadband profitably by building the world's most advanced WiMAX base stations and subscriber units. Aperto fundamentally changes the economics of delivering voice and broadband services through IP-rich, point-to-point and point-to-multipoint networks, allowing carriers to offer a wider variety of services to more customers using less equipment. Its carrier-class WiMAX technology offers industry-leading subscriber density, quality of service, ease of use and reliability. Aperto is a founding board member of the WiMAX Forum as well as a founder and lead contributor to IEEE 802.16 and the ETSI-BRAN standards. Serving more than 400 customers in over 90 countries, Aperto Networks is based in Milpitas, California. For more information on Aperto Networks, go to www.apertonet.com.