

X24 WiMAX Module

Delivering seamless mobility to the M2M world



Proof of Concept



Product Specifications

Supported Bands

- Mobile WiMAX 802.16e
- Dual band WiMAX - 2.5 GHz and 3.5 GHz
- Internal antenna for 2.5GHz band (for demo purposes)
- 2 external antennas - 2.5 GHz and 3.5 GHz

Physical

- Size: 45.2 x 24.4 x 5.6 mm
- Form factor: "24" family of modules (G24, G24-L, C24, W24, H24)

Environmental

- Operating temperature: -30°C to +85°C

Performance

- MIMO (2Rx + 1Tx) supporting MRC, STC
 - Matrix A / SM Matrix B
 - Target transmit power 0dBm to +23dBm
 - Low Current Consumption
 - Operating Voltage: 3.6V – 5.5V
 - TDD Mode
 - 512 and 1024 FFT
 - Multiple BW support (3.5, 4.375, 5, 7, 8.75 and 10 MHz)
 - Frame length: 2.5, 5, 10 msec
 - FUSC/PUSC/AMC sub-channelisation
 - Payload Header Suppression: IPv4 and IPv6
 - QoS profiles supported: BE, UGS, RT-VR, NRT-VR, ERT-VR
 - Mobility Support: Layer 2, Layer 3
- #### Connectors
- Single 70 pin board to board
 - RF: 2 external antenna connectors (Type U, FL R-SMT-01)

Connectivity

- High Speed USB (480Mb/s)
- Compatible with USB 2.0 specification

Operating System Support

- Windows® XP & Vista
- Linux

Modulation Types

- Downlink modulation: PSK/16QAM/64QAM
- Uplink modulation: QPSK/16QAM

Security

- PKMv2, CMAC and Security Associations
- Supported Cryptographic Suites: 3-DES, 128 CCM-Mode, 128-bit AES and AES Key Wrap

Creating the Next Generation.

Motorola is committed to keeping up with the pace of technological advancements. We have introduced this proof of concept X24 module to help you evaluate the benefits of integrating WiMAX into your business. We provide the tools, documentation, and support to ensure a fast and easy evaluation period to integrate the X24 into your existing solution.

The future of M2M.

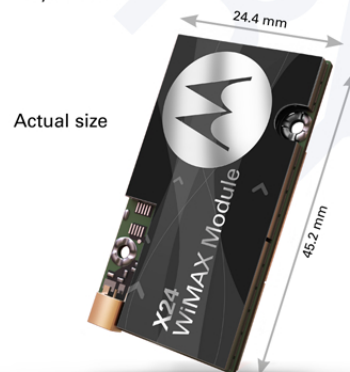
Introducing the X24, a next generation wireless module featuring mobile WiMAX (802.16e) connectivity. The X24 is developed with high-speed data capabilities combined with mobility for a new level of M2M applications. Full WiMAX Wave 2 compliancy and dual-band (2.5/3.5 GHz) support allow connectivity to the majority of WiMAX networks, while MIMO A/B and full Quality of Service (QoS) capabilities ensure maximum throughput and coverage.

Powering cutting-edge automotive applications.

The X24 was designed to bring innovation to automotive and telematics applications. The capabilities of mobile WiMAX offer the ideal combination of bandwidth and mobility to enable broadband connectivity in the auto. Applications like infotainment systems and internet-assisted navigation can finally be made a reality. Fleet management can also leverage WiMAX technology to transfer more information than ever over the more data efficient wireless connection.

Delivering broadband where it's needed.

The X24 is the ideal solution for wireless local-loop (WLL) applications that require a high-speed connection to the internet. The X24 powers mobile WiMAX-enabled USB modems for broadband internet anywhere there is coverage. The X24 can power VoIP pay phones in locations with poor wired infrastructure. The X24 is also perfect for security applications. Full QoS capabilities coupled with the broadband connectivity of WiMAX allows on-demand live streaming of video for residential and commercial surveillance systems.



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The X24 is a proof of concept non-commercial product.