



Motorola CPEi 750 Series

Plug-and-play, High Performance for Data and Voice over IP

Motorola's CPEi 750 features a balanced blend of integrated design, multiple data and voice access ports, high gain antennas with omni directional performance to offer best possible signal strength and a highly sensitive receiver.

This combination not only reduces the base station infrastructure requirements to the operators, but also offers to the subscribers a better quality data and voice services (QoS), stretching the overall service level areas.

Reliability

The CPEi 750 offers the high device reliability critical to ensure an optimal experience for the end user. It also ensures lower operating costs associated with device repair or replacement. WiMAX device quality is governed by Motorola Networks Quality Standards and an established Quality Review Board. The quality process employs a system test plan developed and executed by Motorola's SEI Level 5 Test organization. You can count on the CPEi 750 to last the life of your network with Meantime Time Between Failure (MTBF) of 37 years.

Performance

The CPEi 750 has unique design advantages which improve network performance and end-user experience as well as reduce the total cost of operations. Leveraging MIMO, switched diversity techniques and best-in-industry receiver sensitivity, Motorola's fixed devices increase throughput, optimize utilization of system resources, and reduce the number of access points required to provide service.

Control & Security

Motorola WiMAX CPEi 750 supports remote management capabilities allowing administration and health monitoring of the devices from a centralized network or element management system. Advanced security and authentication protocols protect the end-user and the operator from external threats.

Plug & Play

With true Plug-and-Play capability, the CPEi 750 enables you to speed time to service and reduce operating costs associated with service turn-up. The WiMAX network automatically detects the CPEi 750 upon power-up and performs the necessary authentication processes. CPEi 750 comes with all the device drivers pre-loaded. Subscribers do not need to perform any additional actions other than powering up the unit and connecting the device to their computer and voice handsets. An elegant and user-friendly graphical interface allows end-users to self-diagnose their connections and personalize their service.

Cool Designs

Following the Motorola tradition of iconic designs, the CPEi 750 was designed by the same organizations designing next generation mobile devices and accessories. Strong design principles offer you an important marketing opportunity to inspire subscriber adoption.

DATA SHEET

MOTOROLA WiMAX CPE/750 SERIES

Stylish design – Superior performance

1. STYLISH SLIM DESIGN
2. TRUE PLUG & PLAY: JUST POWER UP THE UNIT AND START YOUR MULTI-MEDIA WEB EXPERIENCE
3. ORIENTATION FREE PLUG & PLAY
4. INTUITIVE USER INTERFACE
5. 1 DATA & 2 VOIP ACCESS PORTS
6. INTEGRATED HIGH GAIN ANTENNAS
7. ADAPTIVE ANTENNA SWITCHING
8. MRC, MIMO A & B AND AAS BEAMFORMING
9. AVAILABLE IN 3.5GHz AND 2.3GHz BANDS
10. OVER THE AIR (OTA) SW UPGRADES

Benefits

- Best-in-class radio performance
- Reliable indoor coverage (MTBF of 37 years)
- Best-in-class throughput
- Five Quality of Services classes
- Robust security

MOTOROLA CPE/750 SERIES SPECIFICATIONS

Frequency Band	2.3GHz and 3.5GHz
Indoor Coverage	Up to 2 kilometers range; Exceptional RF performance
Radio Performance	Scaleable OFDMA employing Time-Division Duplex (TDD) mechanism; Diversity Combining: Maximum-Ratio Combining (MRC); Beamforming support; MIMO Matrix A and B; Convolutional Turbo Coding (CTC); Hybrid Automatic Repeat Request (HARQ)
Connectivity	1 Ethernet Ports; 2 Integrated ATA Ports (VoIP)
Certification & Channel & Modulation Scheme Support	Channel Bandwidths: 5MHz and 10MHz support for 2.3GHz; 5MHz, 7MHz and 10MHz support for 3.5GHz bands QPSK, 16QAM, 64QAM
Quality of Service Classes	BE (Best Effort); UGS (Unsolicited Grant Service); RTPS (Real Time Polling Service); NRTPS (Non Real Time Polling Service); ERTPS (Extended Real Time Polling Service)
Throughput	>5Mbps Down- Link > 2 Mbps Up-Link **
Security	Device authentication based on X.509 digital certification; Authentication methods according to IEEE 802.16e, EAP-TLS and also EAP-TTLS; AES (128-bit CCM) Data Encryption and Authentication Firewall
Remote Configuration and Software Upgrade	OTA (Over The Air) field upgradeable; SNMP v3 Agent; TR-069 Agent; OMA Agent
OS Compatibility	Windows; Mac
RF Performance	Sensitivity: 5dB better than WiMAX Forum Specifications across all modulation schemes; Antenna Gain: 7dBi; TX power out: 26dBm; EIRP: 33dBm; Noise Figure: 5dB
Mechanical and Electrical	External Power: 100-250 Volts, 1A AC input; Operating Temp: 0°C to 40°C; Operating Humidity: 5% to 95%, non-condensing; US and International plug support
Environmental and Regulatory	North America; Europe; Asia; Latin America

** Throughput rates are dependant on RF conditions and network planning.



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