



# wi4 WiMAX

## Access Service Network (ASN) Gateway

Offering wholesale services, security and seamless for both mobile and fixed applications

Subscriber services, security, and seamless experience are the foundation of all wireless broadband solutions. Motorola's ASN Gateway delivers this foundation by supporting Broadband Remote Access Server services (BRAS), service edge authentication, and fast handovers all within a highly available, redundant, and scalable architecture.

Motorola's ASN Gateway, based on the 802.16e WiMAX standard, integrates multiple bands and frequency solutions. The Motorola wi4 WiMAX broad portfolio of access points, paired with this ASN Gateway, provides a full, carrier-class, fixed and mobile network that delivers rich voice and secure multimedia content.

The Motorola ASN Gateway helps monetize the WiMAX network solution with its subscriber services. A WiMAX operator has the opportunity to provide wholesale service, allowing multiple Internet Service Providers (ISPs) to operate on the WiMAX network. Each ISP on the network can define a number of different services and enhanced Quality of Service (QoS) features according to his individual business model.

### Distributed Network Architecture

Motorola's distributed network architecture delivers a simple, peer-to-peer implementation based on a flat, all-IP design. Motorola's ASN Gateway is a key component of this architecture, and gives operators unsurpassed network scalability, and a truly distributed access network.

A single Motorola ASN Gateway can support up to 1000 WiMAX sites while offering functions such as over the air synchronization, IP subscriber management, QoS policy enforcement and mobility. This allows operators to have both fixed and mobile applications, service quality and security, and substantially reduced CAPEX and OPEX models.

### High Performance Controller, Router/FA & Switch

The Motorola ASN Gateway is comprised of three functional elements - a control platform for mobility management and authentication, a routing platform for subscriber policy enforcement, and a switching platform for access point connectivity. This ASN Gateway is optimized for handoffs with its high performance switching and controller functionality that facilitates fast, intelligent communication between Motorola's WiMAX Access Points

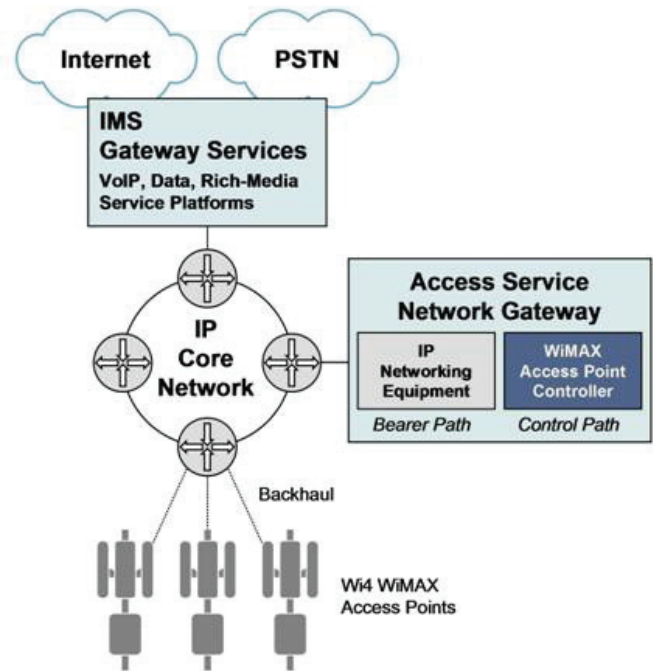
Motorola's ASN Gateway allows operators to scale the control plane and bearer path independent of one another. This lets operators invest in a solution that supports their network and subscribers today while maintaining the flexibility to scale the essential components of their network for tomorrow's growth.

**DATA SHEET**

WiMAX ASN-GW

A critical element in a WiMAX network deployment, the Motorola ASN Gateway provides features such as:

- Paging Controller (PC)
- Context Repository (CR) function
- QoS Support
- Security Key Distribution
- Policy Enforcement
- Extensible Authentication Protocol EAP Support
- Authentication, Authorization and Accounting, (AAA) Service
- Internet Protocol security IPSec for control plane messaging
- Mobile IP & Foreign agent functionality
- IP traffic aggregation and EP (Enforcement Point) Router
- Fast Handovers
- Network Management/Simple Network Management Protocol SNMP Support



WiMAX Access Service Network Gateway Specifications (ASN Gateway)	
Application	Fixed & Mobile
Power Requirements	Dual redundant -48V rails
Thermal Characteristics	Operating range: -5° C to 55° C
Regulatory Compliance	ETSI & FCC type approved & RoHS/WEEE & CMM compliant
APC (Access Point Controller)	
Dimensions	(HxWxD): 555.6mm x 480mm x 534 mm (21.9" x 18.9" x 21")
Chassis	12.5U chassis Up to 5 Pairs of Controller Cards with 2N Redundant configuration
Capacity	Up to 1000 WiMAX sites Up to 1,000,000 Fixed Subscribers, or Up to 300,000 Mobile Subscribers
Router/FA	
Dimensions	(HxWxD): 400mm x 444.5mm x 558.8 mm (15.75" x 17.5" x 22")
Chassis	9U chassis Up to 12 Line Cards, each supporting 4 Gb Ethernet ports * Up to 2 System processor cards (2N redundancy) **
Capacity	Up to 256,000 subscribers (88Gbps -nominal) ***
Switch	
Dimensions	(HxWxD): 310mm x 443mm x 572mm (12.21"x17.45"x 22.5")
Chassis	7U chassis Up to 8 Line Cards, each supporting Up to 20 ports
Capacity	Up to 1 Million IPV4 Routes Up to 480 Million pps routing performance

\*Up to 12 Line cards for large scale, Up to 4 Line cards for medium scale

\*\* Available for Large and medium scale systems

\*\*\* Up to 256,000 (88Gbps) for large, 96,000 (32Gbps) for medium, 8,000 (2.4Gbps) for small scale systems

**Why Motorola**

Motorola is committed to leading the industry with end-to-end WiMAX solutions addressing the full scope of the operator's deployment needs including access, core, devices, network management and services.

Motorola has won major awards across its wi4 WiMAX portfolio including awards for the wi4 WiMAX Distributed Network Architecture, the wi4 WiMAX Flexible Access Point Portfolio and our Customer Premises Equipment. Motorola's MOTOwi4™ comprehensive wireless broadband portfolio addresses the needs of the wireless broadband market with end-to-end solutions covering all aspects of the broadband wireless access deployment. Our deep and extensive product and services portfolio, decades of R&D investment, and experience as a global supplier of broadband wireless access solutions allows us to offer best in class wi4 WiMAX solutions.



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