



# Motorola

## wi4 Indoor



### Definition

Motorola's wi4 Indoor solutions transform buildings into powerful communications networks, enabling quick and cost-effective distribution of high-speed broadband to multi-dwelling, tenant, and enterprise environments.

### Convenient Access

American Wireless Broadband installed a Motorola Canopy subscriber module on the roof of the Colonial Village apartment building in Chicago and connected it to a Powerline MU Gateway to provide broadband access for its 60 tenants. This solution helped reduce operational costs by 50 percent by eliminating the need to send a truck out to install service for each new subscriber. "To access the service, users simply plug a modem into an electrical outlet. It doesn't matter where they plug it in – it can be in the kitchen, the bedroom or anywhere. And they always get comparable speeds," said Gunnar Kauke, co-founder and president of American Wireless Broadband.

### Bringing Broadband Indoors

Accessing the Internet via broadband does not need to be a complicated system of wires and boxes. Motorola's Indoor solution extends wireless coverage indoors. Whether meeting business requirements, sharing information across an organization or securing a private network, the Indoor solutions provide a comprehensive choice of connectivity, enabling service providers, governments and enterprises to deploy the optimal solution or combination of solutions to meet their wireless coverage needs.

Motorola's MOTOwi4™ Indoor portfolio includes Enterprise Wireless LAN (WLAN) and Broadband over Powerline (BPL) solutions.

WLAN solutions enable seamless mobility within buildings. Based on industry standards, this portfolio of products is enterprise-class, high-performing, scalable and optimized for mobility to maximize device battery life, performance and roaming over voice over WLAN phone calls.

The BPL product portfolio offers reliable, widespread access by transforming a building's electrical grid into a powerful communications network. The low-cost, scalable and secure system is designed for multi-dwelling units (MDUs) and multi-tenant units (MTUs) to provide broadband services to tenants - simply and cost-effectively. BPL gives a wide range of businesses and customers the ability to use broadband services through a combination of radio, Ethernet, networking, HomePlug® and modem technologies that deliver high-speed and voice data over existing power lines.

### Key Benefits

- Simple, cost-effective extension of existing networks
- Scalable and easy to deploy through a self-installation solution
- Alternative to pulling cable in existing buildings
- Improved efficiency and security

### Key Products

#### Enterprise Wireless LAN

This product portfolio includes radio frequency (RF) switches, wireless switches and thin access points, access points, CompactFlash client radio cards and client bridges.

- **Wireless Switching** – The collection of switching products deliver enhanced mobility services enabling locationing, mobile office applications integrated with robust security to maintain confidentiality of data.
- **Access Points** – Lightweight and full-function access points provide connectivity to a broad array of WLAN and mobile devices.
- **RF Management Software** – This software plans, monitors and analyzes wireless network performance.

#### Broadband over Powerline

This portfolio combines radio, Ethernet, networking, HomePlug® and modem technologies to enable the transfer of high-speed data over existing electrical power lines.

- **Powerline MU Gateway** – This head-end device converts the Ethernet signal to the Home Plug® protocol\*. The Gateway then injects this signal directly into the electric line.
- **Powerline Modem** – This customer premise equipment (CPE) converts the HomePlug signal back into Ethernet so the subscriber can directly connect his or her computer or router to the modem to access the Internet.

## Broadband Revenue Prediction

"Broadband access revenues will increase from US\$39 billion in 2006 - to US\$66 billion in 2010 - across the top five Western European countries, the U.S. and Japan combined."

- Understanding & Solutions industry report, February 2007

### Instant Access

The Westin La Paloma Resort and Spa in Tucson, Arizona, used the Powerline MU Gateway to connect guest rooms for a customer conference. Installation took just four hours to connect 70 rooms. "I was surprised by how easy it was. I just plugged in the modem and I had access," said a user at Westin La Paloma Resort and Spa.

### Critical Access

Among Canada's premier academic health centers, Sunnybrook Health Sciences Centre has always recognized the need for an effective, collaborative working environment for medical and administrative staff. To continuously improve in this area, Sunnybrook realized that it needed to put access to clinical information systems into the hands of users, no matter where they were. Traditionally, "access to clinical information systems meant walking to the PCs located at centralized working stations," said Oliver Tsai, Director of Information Technology at Sunnybrook. "We decided to take advantage of the 'anytime, anywhere' approach and provide information directly at the point of care. When we looked at Motorola's overall enterprise wireless solution, we found the decision easy to make."

### Typical Users

- **Higher Education** - enable a powerful communications network for students and faculty
- **Internet Service Providers** - enter new geographies, expand services offerings by establishing partnerships with property managers
- **Manufacturers** - improve operational efficiency by providing quick, secure online access to employees within the building
- **Healthcare** - enable voice services where cell service is not available and exchange secure information, such as medications and patients, for collection and sharing at the location where it's needed
- **Hospitality** - expedite credit card transactions during peak business periods and reduce exposure to broadband network downtime
- **Transportation** - provide remote monitoring to control heavy equipment, dispatch scheduling and client deliveries
- **Retail** - connect branch offices with headquarters to provide voice and data services
- **Property Managers** - easily provide broadband services to their tenants without pulling new cable



### Empowering Personal Broadband Revolution

The wi4 Indoor portfolio is part of Motorola's MOTOwi4™ comprehensive portfolio of wireless broadband solutions and services that expand and extend coverage. With this unique portfolio comes an innovative end-to-end solution. Delivering IP coverage to virtually all spaces, MOTOwi4 also includes wi4 Fixed, wi4 Mesh, and wi4 WiMAX solutions for private and public networks. All of the MOTOwi4 solutions complement each other and can be deployed to meet the specific requirements for public and private networks.

For more information on MOTOwi4 solutions, visit [www.motorola.com/motowi4](http://www.motorola.com/motowi4)

\* The HomePlug Powerline Alliance is an industry organization that is developing in-the-home and to-the-home powerline communications technology protocols. These protocols are being widely used in the industry and are contributing to IEEE's and other international standards development.



**MOTOROLA**

Motorola, Inc. [www.motorola.com/motowi4](http://www.motorola.com/motowi4)

**MOTOwi<sup>4</sup>**

The information presented herein is to the best of our knowledge true and accurate as of August 2007. No warranty or guarantee expressed or implied is made regarding the capacity, performance or suitability of any product. MOTOROLA and the Stylized M Logo are registered in the U.S. Patent and Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2007