

# Wireless Broadband that Helps Minimise Time-to-Market and Maximise Profitability

Motorola Canopy™ Wireless Broadband



# A New Spectrum of More Powerful, More Affordable Wireless Broadband Internet Service

In today's broadband communications environment, Internet service providers know what they need to succeed. Faster deployment. Higher performance. Increased return on investment (ROI). Providers need to differentiate themselves from a crowd of competitors, create competitive advantage and attract and please increasingly demanding individual and business customers.

Motorola's Canopy™ system is the wireless broadband solution that significantly reduces the cost and shortens the time providers need to deliver high-speed wireless broadband service to consumers and businesses upgrading from dial-up. The Canopy platform also enables a range of in-demand network services including voice over IP, video over IP and surveillance and security applications.

## Wireless Broadband

The Canopy system allows ISPs to leverage powerful radio technology to provide high-speed broadband access. The platform has proven itself to be one of the industry's most reliable and cost-effective broadband solutions. A rapidly growing number of providers—in more than 100 countries on six continents—are taking advantage of its exceptionally low equipment and deployment costs to build or extend their networks, offer high-speed wireless DSL and other sophisticated services that help to grow their revenues and increase profitability.

## More Customers More Quickly

The Canopy platform enables Internet providers of all sizes to reach and attract more customers as well as increase customer satisfaction. The system helps create a compelling competitive advantage by making deployment and delivery of extended broadband access easier and faster. Equally important, Canopy technology's inherent interference-resistance provides clear communications to customers no matter how far they are from the existing network, or how many subscribers are in service.

## Reliable and Cost-Effective

The Canopy platform is built to the exacting quality standards today's providers and customers demand. It provides the carrier-

grade toughness, high performance, scalability and ease-of-use to extend coverage, expand services, improve security and increase ROI. And it does so without significant investment in infrastructure, subscriber equipment, frequency and site licenses or deployment expenses. And because it is a wireless solution, the Canopy system enables you to eliminate access charges by bypassing local exchange carriers.

## Streamlined Installation

Intelligent protocols streamline the deployment and operation of wireless Canopy networks of all sizes. A simple network design makes the system easy to install. There is no need to run overhead or in-ground wire, install microwave or software. The equipment is intuitive and efficient, providing built-in installation and deployment assistance that makes it faster to get up and running... often in a matter of hours or days instead of weeks or months.

## Unlimited Scalability

When your capacity needs increase, the Canopy solution is scalable to accommodate changing requirements, wider geographic areas, larger user populations and higher traffic volumes. Thanks to the system's high tolerance for interference and its directional antennas, adding new transmitters creates more capacity—not more interference.

## Expertise and Support

When you deploy the Canopy platform, you're also deploying Motorola's more than 75 years of radio and communications expertise. Motorola empowers each customer with our knowledge and experience by forging a long-term relationship that assures you of exceptional support, wherever your networks are located.



The basic building blocks of the Canopy system are compact, easy to handle, simple to install and unobtrusive. The **Canopy AP cluster** includes the **Access Point (AP) module** and the **Cluster Management Module (CMM and CMM Micro)**. The **Canopy Backhaul (BH) module** delivers a broadband connection to your AP Cluster from a remote location. Also available is the **Bandwidth and Authentication Manager (BAM)** which allows providers to vary the bandwidth to individual users. Each AP unit can serve up to 200 **Subscriber Modules (SM)**.

# Making Delivery of Broadband Service Easier and Faster than Ever Before

Today's communications marketplace is crowded with broadband access alternatives. However, no system can match the Motorola Canopy platform's combination of advanced technology, simplified configuration, rapid deployment and remarkable cost effectiveness.

## Flexible Configuration and Integration

The Canopy system offers configuration options that meet and exceed the expectations of providers and their customers. The Canopy system offers flexible configuration options for adaptation to meet the needs and expectations of different customer communities. As a point-to-multipoint system, the Canopy platform is exceptionally efficient and affordable for communities and businesses of all sizes. As a point-to-point backhaul application, it is a powerful dedicated data link. In addition, the system includes interfaces that enable it to integrate easily with standard network management tools and billing systems, as well as diagnostic capabilities you'll need to monitor the network remotely.

## Premier Performance

The Canopy solution delivers superior performance using a modulation scheme that improves the quality of data delivery and mitigates interference from other systems. The system's wireless signals are highly effective in penetrating obstacles and avoiding obstructions, making it as efficient in dense urban environments as it is in suburban areas or rural locations. The Canopy

platform provides broadband access in a variety of spectrum choices, ensuring exceptional broadband performance no matter which spectrum is best for your network.

## Enhanced Security

Motorola's Canopy platform offers security with over-the-air DES (Data Encryption Standard) encryption and is also available with AES (Advanced Encryption Standard) capabilities, which provide 128-bit encryption, to ensure secure data delivery and exceptional reliability. With AES, it would take approximately 149 trillion years—that's older than the earth itself—to crack a code.

## An Exceptional Broadband Experience

The Canopy platform's upload and download speeds are as fast as or faster than virtually every other service available today. The point-to-multipoint Canopy system offers up to 7 Mbps (aggregate data rates) and the point-point system delivers 33 Mbps (aggregate data rates) to your users now. Of course, upload and download speeds are affected by several factors so actual speeds may vary, but the potential to offer an incredible broadband experience is inherent in the Canopy system.

## How the Canopy System Is Enabling Providers to Compete More Successfully

**Amocom Technologies** needed a reliable solution that could be deployed quickly to bring high-speed data connectivity to the small and medium size enterprises in Cork, Ireland. After experimenting with several technologies, Amocom selected Motorola's Canopy wireless broadband products in the 5.7 GHz band. Amocom wanted a product that was competitively priced, rapidly deployable, scalable and above all else reliable. Motorola's Canopy product met all of these criteria and Amocom became the first company to deploy Motorola Canopy in Europe using the 5.7 GHz frequency band. Today, Amocom has far greater coverage in the city and surrounding area than ADSL and serves SME, corporate, educational and residential markets.

**An Iowa Internet Service Provider** was beset with hundreds of calls each day from customers complaining

about interference and quality of service. Recognising that its old system could not scale successfully, the company ripped out the network and installed the interference-tolerant Canopy platform. Since the Canopy system has been deployed, customer satisfaction has increased dramatically and daily complaint calls have shrunk from hundreds to a mere handful.

**One of China's largest ISPs** is relying on Canopy technology to deploy the commercial wireless broadband network in a city of more than five million residents. The company uses Canopy equipment to enable them to penetrate the market rapidly and attract customers eager to have the latest wireless technology which can tap into the Internet and web-based applications.



## The Canopy Affiliate Programme Helps Make Deployment and Operation Even Easier

As the Canopy system has grown into one of the industry's most successful wireless broadband platforms, other companies are designing products and technology that complement the system. To help our customers get maximum value from Canopy technology, Motorola has created the Canopy Affiliate Programme. This programme helps our customers identify technology—including voice, video, security and other products—that has been proven to integrate successfully with the Canopy platform, and to deliver excellent value and cost-efficiency. To access Canopy Affiliate Programme information, visit the Canopy website at [www.motorola.com/canopy](http://www.motorola.com/canopy).

The Canopy™ wireless broadband system enables you to extend your broadband networks faster and more cost-effectively than with wired technology, with virtually no drop-off in quality of service or security.



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For more information about how the Canopy system can extend your network and services, provide competitive advantage and outstanding ROI, call 001-800-795-1530 internationally or visit us at [www.motorola.com/canopy](http://www.motorola.com/canopy)

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