



# ***Motorola Point-to-Point 200 Series***

Wireless Ethernet Bridges



# High-Speed, Cost-Conscious Connectivity

## Accelerate Throughput Affordably

Until now, many service providers and enterprises have been unable to supply high-speed wireless broadband connectivity to their subscribers and users because of obstacles that disrupted communications. With their constituents located in areas affected by foliage and buildings, connectivity options were typically limited to expensive and restrictive wireline solutions.

Now Motorola's Fixed Point-to-Point Wireless Ethernet Bridges – PTP 200 Series – give enterprises of all types and sizes a reliable alternative to reach around obstacles that partially block a path's radio line-of-sight (Fresnel zone) but leave the visual line-of-sight clear. The extremely low cost of ownership makes a PTP 200 solution affordable for even the most restricted budgets. Plus, the PTP 200's wireless capabilities allow data, voice and video communications to extend beyond the limits of a wired network.

## Powerful OFDM Technology

Operating in the 5.4 GHz radio frequency (RF) band at Ethernet data rates up to 21 Mbps, PTP 200 Series links are designed to securely transport your data, voice and video communications in both near-line-of-sight (nLOS) and line-of-sight (LOS) environments. The PTP 200's Orthogonal Frequency Division Multiplexing (OFDM) technology provides resistance to interference and fading. The result is that PTP 200 solutions deliver exceptional performance in the presence of multi-path interference caused by buildings and other obstructions.

## GPS Synchronization

In addition to OFDM, PTP 200 Series solutions are equipped with powerful GPS synchronization capabilities that significantly reduce self-interference, allowing network operators to:

- Collocate multiple radios on a tower or rooftop
- Collocate a PTP 200 backhaul link with an existing Canopy® network
- Deploy a 5.4 GHz frequency band overlay network

## Dynamic Frequency Selection (DFS)

Because the 5.4 GHz radio frequency band is shared with certain government radar systems, networks operating in this band must have DFS capabilities to detect radar and automatically switch to a non-interfering channel.

## Models That Meet Your Needs

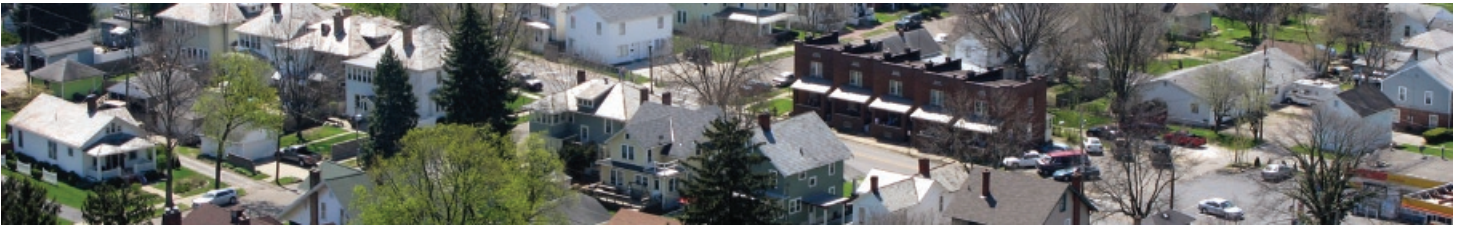
PTP 200 Series bridges are available in several models to meet your individual requirements:

- **Integrated:** With up to 21 Mbps Ethernet data rate and a built-in antenna, the 5.4 GHz Integrated systems are the perfect choice for environments where reliability and high throughput are major requirements. Plus, the Integrated systems are available in two versions: 56-bit Data Encryption Standard (DES) and 128-bit Advanced Encryption Standard (AES).
- **Connectorized:** The PTP 200 Series Connectorized models offer the same OFDM-based technology found in the Integrated version with the gain advantage of external antennas. (Antennas are purchased separately.) You can choose the radio and antenna configuration that best meets your business and environmental requirements and fine tune your solution to achieve more speed and distance across noisy or obstructed paths. As with the Integrated systems, Connectorized models are available in 56-bit DES and 128-bit AES Encryption versions.



Typically, a PTP 200 system's performance results in increased productivity and lower cost-of-ownership.





## **Reliable, Secure Wireless Ethernet Bridges for near-Line-of-Sight and Line-of-Sight Environments**

### **End-to-End System Management**

A simple network design allows PTP 200 systems to complement your existing network and integrate easily with web-based and SNMP-based management systems, as well as the Canopy® Prizm and CNUT (Canopy Network Update Tool) systems. The radios are exceptionally easy to install with built-in installation and deployment assistance features that make deployment quick and easy. PTP 200 systems are often deployed in a day or less, rather than weeks or months.

### **Productivity Payoff**

PTP 200 Series solutions are often the most cost-effective option when you consider:

- The business impact from being able to connect in an area that was previously inaccessible
- The economic impact from being able to deploy network extensions quickly while saving on the labor and material costs of laying cable
- The revenue gains from adding new subscribers without expensive and time-consuming network build-outs
- The productivity gained by providing IP connectivity to buildings not served by broadband or fiber communications
- The ability to meet growing bandwidth requirements for applications such as multimedia, video surveillance or voice-over-IP
- The ability to backhaul more local loops using a single link

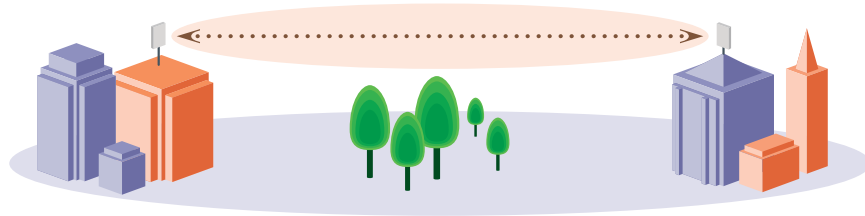
### **Put PTP 200 Bridges to Work for You**

PTP 200 solutions offer wireless broadband advantages to serve a wide variety of organizations and applications.

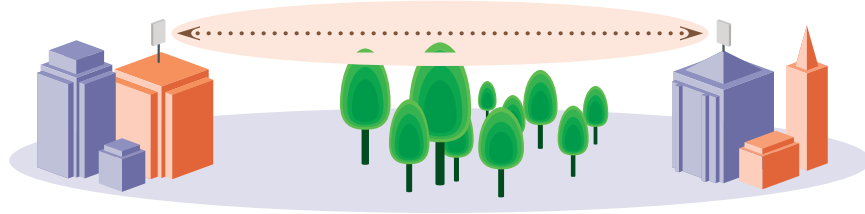
- **Service Providers:** PTP 200 solutions can help you increase your customer base and revenues by extending your network to reach customers in remote and underserved areas, by offering wireless broadband services to new and existing subscribers and by backhauling traffic from multiple access points to a point of presence.
- **Enterprises:** Now you can support ever-increasing bandwidth requirements in environments where wired networks are too expensive or impossible to implement, while boosting productivity for business-critical applications.
- **Vertical Markets:** Whether linking networks between buildings, linking networks in a campus environment, educating students in remote locations, sharing patient X-rays and digital images, or backhauling traffic, PTP 200 Series radios offer reliable connectivity for multiple applications in a variety of markets, including transportation, hospitality, healthcare and education.
- **Government:** In government agencies, the PTP 200 can provide connectivity for applications such as video surveillance, high-speed Internet access, public safety and traffic backhaul while staying within strict budgetary guidelines.



Line-of-Sight (LOS) – Both visual line-of-sight and radio line-of-sight (Fresnel zone) are clear.



Near-Line-of-Sight (nLOS) – Clear visual line-of-sight, but Fresnel zone is obstructed.



#### Motorola Wireless Broadband

The Fixed PTP 200 Series Wireless Ethernet Bridges can operate as stand-alone links or integrate easily with other systems in Motorola's Wireless Broadband portfolio of innovative solutions that create, complement and complete IP networks. Delivering IP coverage to virtually all spaces, the Wireless Broadband portfolio includes Fixed, Mesh, Indoor and WiMAX solutions for high-speed connectivity over private and public networks.

#### Additional Information

For more information on Motorola's PTP 200 Series bridges, refer to the PTP 200 Series Specification Sheet.



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