

Motorola's Wireless Broadband Point-to-Point Solutions

The PTP 100, 400 & 600 Series
Part of Motorola's MOTOwi4™ portfolio

MOTOwi⁴™





High-Speed Point-to-Point Solutions Engineered for Simple-to-Complex Applications in Challenging Environments

With the introduction of its MOTOwi4™ product portfolio, Motorola makes it easier and more cost effective to build next generation wireless networks for a wide range of applications. These systems will enable providers to increase revenue opportunities and customer loyalty by delivering today's—and tomorrow's—most innovative and in-demand broadband services.

Proven Canopy® Point-to-Multipoint Platform

Canopy solutions are part of Motorola's MOTOwi4 portfolio of innovative wireless broadband solutions that create, complement and complete IP networks. Delivering IP coverage to virtually all spaces, the MOTOwi4 portfolio includes Fixed, WiMAX, Mesh, and Broadband over PowerLine solutions for private and public networks. The globally proven Canopy Platform is delivering successful high-speed solutions in more than 100 countries worldwide.

Motorola's Point-to-Point Portfolio

The Motorola Point-to-Point Portfolio includes powerful technology that helps enterprise users, service providers and carriers establish highly reliable and secure point-to-point wireless links for bandwidth-intense applications. The portfolio includes products that cost-effectively deliver reliable links and higher throughput in Line-of-Sight (LoS), near-LoS and Non-LoS environments. The underlying technologies - based on Motorola's proprietary design as well as Orthogonal Frequency Division Multiplexing (OFDM) - offer the flexibility to deliver custom solutions for a wide range of consumer, enterprise, carrier and government markets and applications. The Motorola point-to-point wireless Ethernet bridges seamlessly integrate with the MOTOwi4 solutions including WiMAX, Metro WiFi and today's Canopy solutions.

Highly Reliable, Efficient Point-to-Point Solutions for the Most Challenging Locations and Applications

Motorola offers a comprehensive portfolio of point-to-point solutions to meet a variety of connectivity challenges. The Line-of-Sight PTP 100 Series is designed to operate in the 2.4, 5.1, 5.2, 5.4 and 5.8 GHz frequencies. The PTP 400 Series operates in the 4.9, 5.4* and 5.8 GHz frequencies and the PTP 600 Series makes use of the 5.4* and 5.8 frequency bands. Operators use the systems' higher bandwidth to transmit IP data, video, VoIP and channelized voice for a variety of markets and applications.

Point-to-Point Benefits

The Point-to-Point Portfolio provides exceptional link reliability and performance, significantly reducing interference in noisy RF conditions and nLoS and NLoS environments. Small footprints and power over Ethernet reduce the amount of valuable tower space needed, and remote link management capabilities help lessen operating costs. Installation is fast and simple, with units designed to be easily mounted and adjusted even in the smallest of spaces.

The Motorola Point-to-Point Series

PTP 100 Series

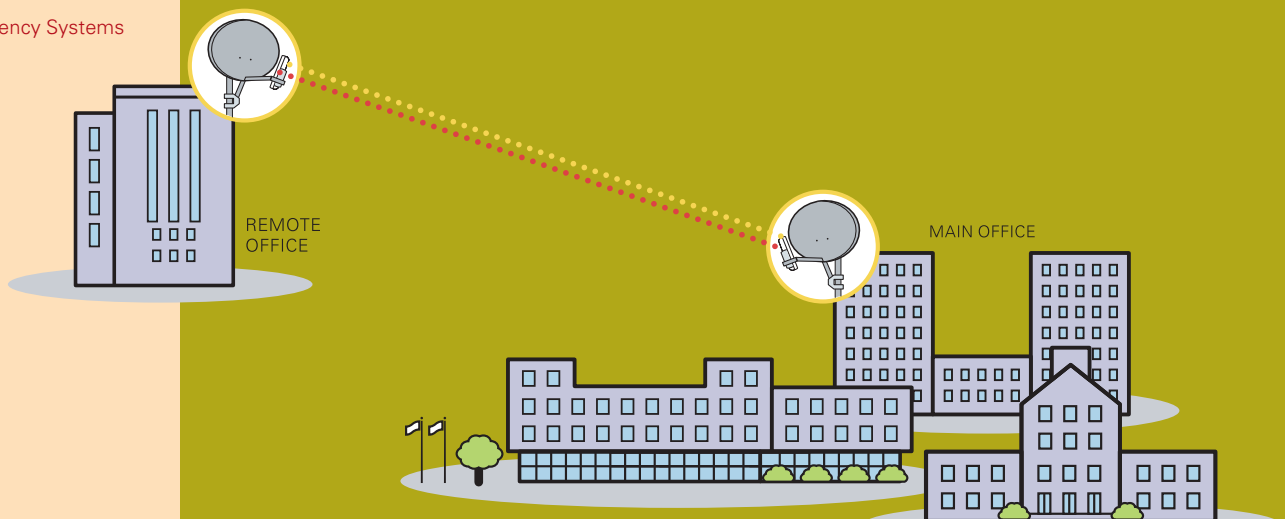
PTP 100 Lite

Frequencies	2.4 GHz, 5.1 GHz, 5.2 GHz, 5.4 GHz, 5.8 GHz
Range	LoS - Up to 35 Miles (56 Kilometers)
Usable Throughput	7.5 Mbps
Security	DES and AES Encryption
Technology	Proprietary
Unique Features	<ul style="list-style-type: none">• Line-of-Sight• Highly Reliable• Weather Resistant• Compact & Rugged Design• Consistent Data Rates in Face of Interference• Reflector Available to Extend Range• Options for Solar and Wind Power

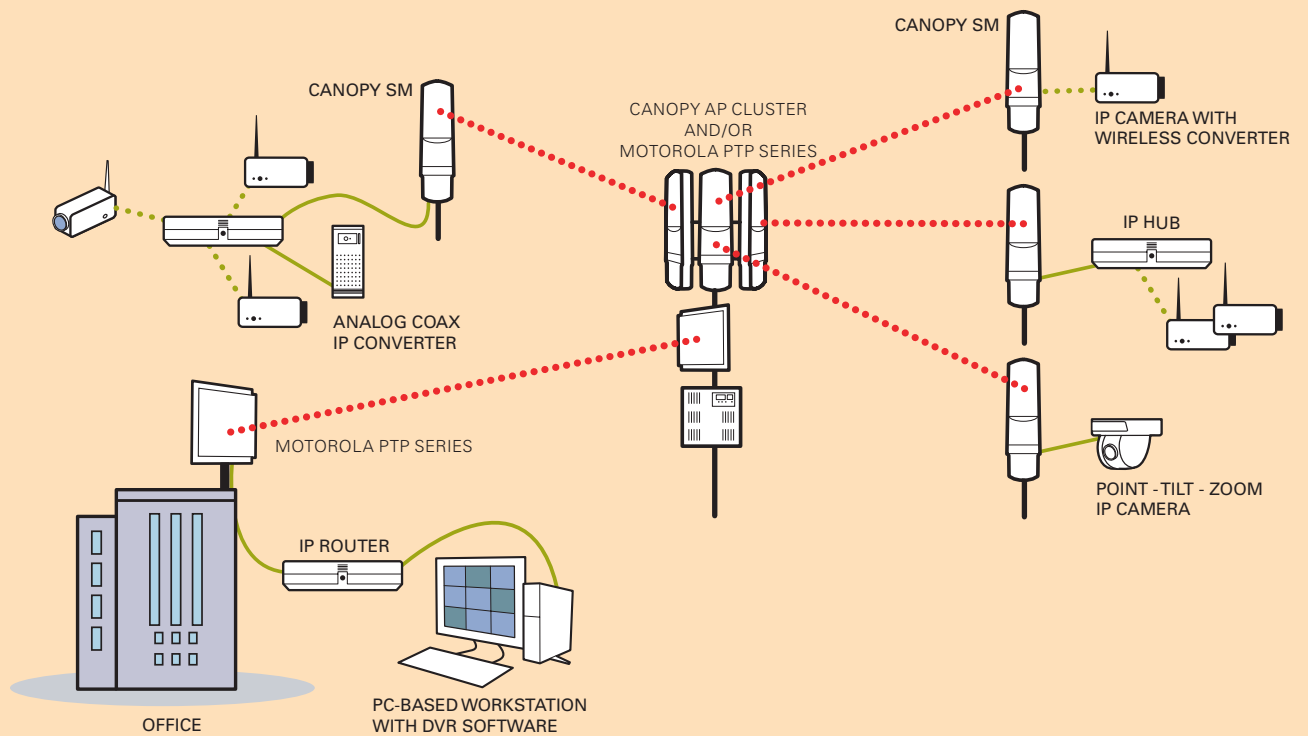
Ideal Applications

- Rural or Remote Locations
- Uniting Campuses
- Temporary & Emergency Systems
- Video Surveillance
- Telemedicine
- E-Learning
- Banking

Uniting Campuses and Remote Facilities



IP Video Surveillance Applications



PTP 100

Frequencies	2.4 GHz, 5.1 GHz, 5.2 GHz, 5.4 GHz, 5.8 GHz
Range	LoS - Up to 35 Miles (56 Kilometers)
Usable Throughput	14 Mbps
Security	DES and AES Encryption
Technology	Proprietary
Unique Features	<ul style="list-style-type: none"> • Line-of-Sight • Highly Reliable • Weather Resistant • Compact & Rugged Design • Consistent Data Rates in Face of Interference • Reflector Available to Extend Range • Options for Solar and Wind Power

Ideal Applications

- Rural or Remote Locations
- Uniting Campuses
- Temporary & Emergency Systems
- Video Surveillance
- Telemedicine
- E-Learning
- Backbone for Metro WiFi Networks
- Banking

PTP 400 Series



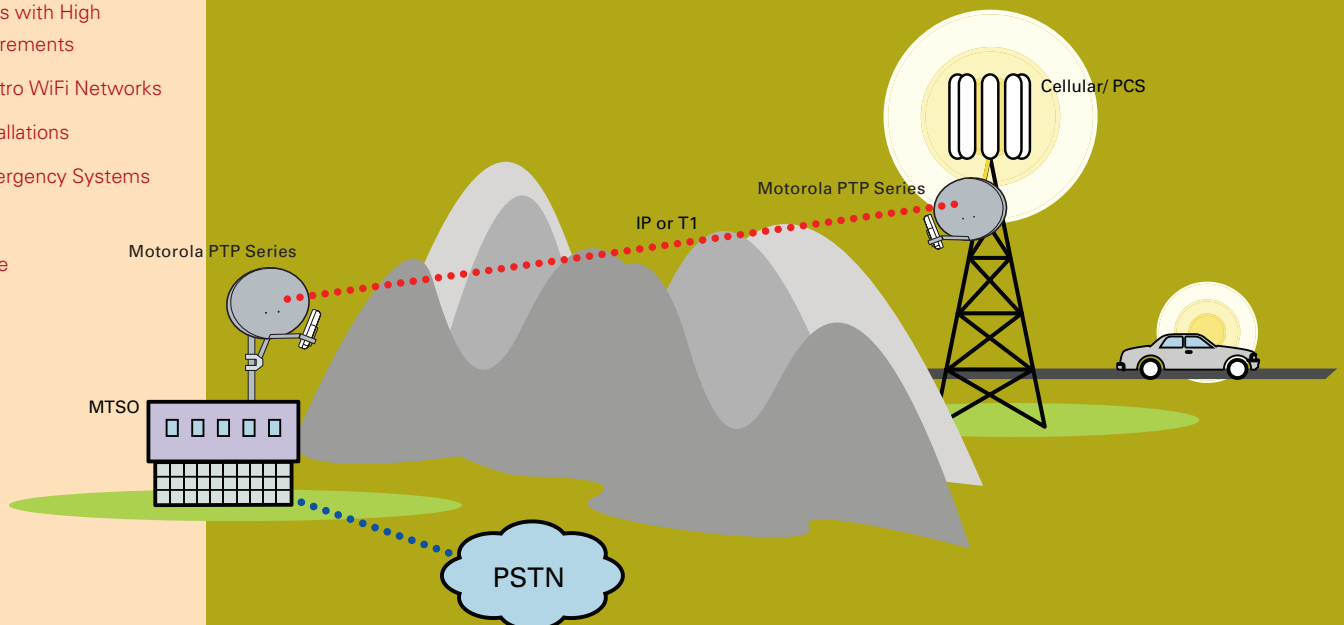
PTP 400 Lite

Frequencies	4.9, 5.4* and 5.8 GHz
Range	LoS - Up to 124 Miles (200 Kilometers) nLoS - Up to 25 Miles (40 Kilometers) NLoS - Up to 6 miles (10 Kilometers)
Usable Throughput	Dynamically variable modulation ranges from 1.5 Mbps to 21 Mbps
Security	Proprietary Scrambling Technique
Technology	OFDM
Unique Features	<ul style="list-style-type: none">• Software Upgradeable to full-speed PTP 400• Line-of-Sight• NON and Near Line-of-Sight• Carrier Class Reliability• Weather Resistant• Compact & Rugged Design• Dual Polarized Antennas• Integrated & Connectorized Antenna Options• Adaptive Modulation• Dynamic Frequency Selection• Transmit Diversity• Redundant Power Supplies

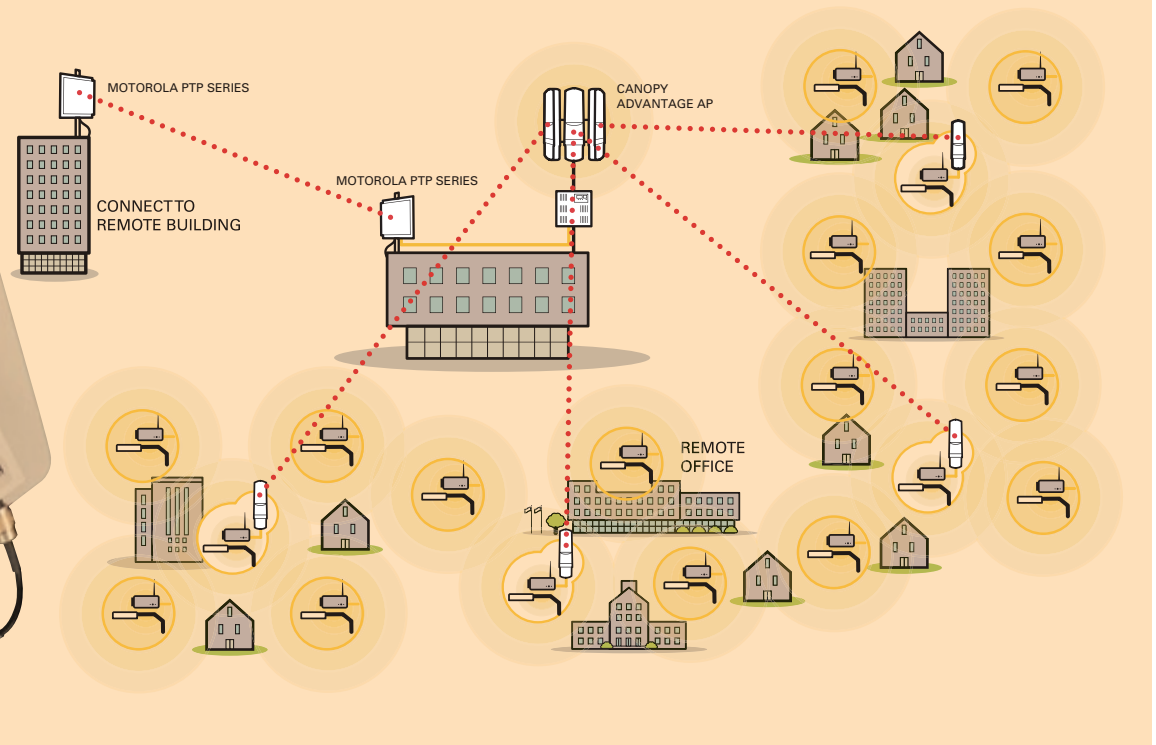
Ideal Applications

- Urban/Suburban Locations
- Uniting Campuses with High Bandwidth Requirements
- Backbone for Metro WiFi Networks
- Government Installations
- Temporary & Emergency Systems
- Cellular Backhaul
- Video Surveillance
- Telemedicine
- E-Learning
- Banking

Backhauling Cellular and 3G IP Data



Backbone for Metro Wi-Fi



PTP 400

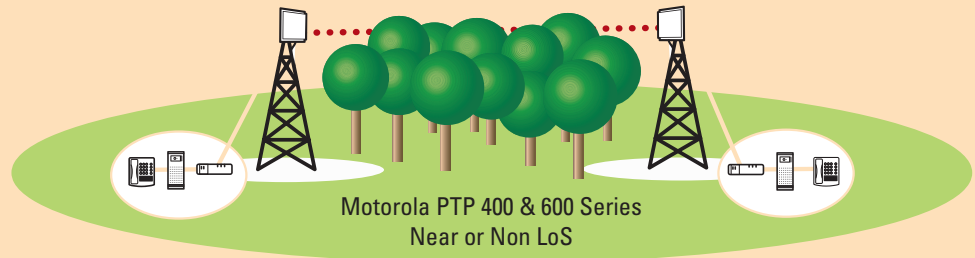
Frequencies	5.4 and 5.8 GHz
Range	LoS - Up to 124 Miles (200 Kilometers) nLoS - Up to 25 Miles (40 Kilometers) NLoS - Up to 6 miles (10 Kilometers)
Usable Throughput	Dynamically variable modulation ranges from 3.0 Mbps to 43 Mbps
Security	Proprietary Scrambling Technique
Technology	OFDM
Unique Features	<ul style="list-style-type: none"> • Line-of-Sight • NON and Near Line-of-Sight • Carrier Class Reliability • Weather Resistant • Compact & Rugged Design • Dual Polarized Antennas • Integrated & Connectorized Antenna Options • Adaptive Modulation • Dynamic Frequency Selection • Transmit Diversity • Redundant Power Supplies

Ideal Applications

- Urban/Suburban Locations
- Uniting Campuses with High Bandwidth Requirements
- Backbone for Metro WiFi Networks
- Government Installations
- Temporary & Emergency Systems
- Cellular Backhaul
- Video Surveillance
- Telemedicine
- E-Learning
- Banking

PTP 600 Series

E1/T1 Solutions for Carriers and Enterprise Applications



PTP 600 Lite

Frequencies	5.4* and 5.8 GHz
Range	LoS - Up to 124 Miles (200 Kilometers) nLoS - Up to 25 Miles (40 Kilometers) NLoS - Up to 6 miles (10 Kilometers)
Usable Throughput	Dynamically variable modulation ranges from 7 Mbps to 150 Mbps
Security	Proprietary Scrambling Technique
Technology	OFDM
Unique Features	<ul style="list-style-type: none">• Software Upgradeable to full-speed PTP 600• Line-of-Sight• NON and Near Line-of-Sight• Carrier Class Reliability• Weather Resistant• Compact & Rugged Design• Dual Polarized Antennas• Integrated & Connectorized Antenna Options• Adaptive Modulation• Dynamic Frequency Selection• Transmit Diversity• One Built in E1/T1• Redundant Power Supplies• Optional Fiber Optic Data Module

Ideal Applications

- Urban/Suburban Locations
- Fiber Replacement
- Uniting Campuses with High Bandwidth Requirements
- Backbone for Metro WiFi Networks
- Government Installations
- Temporary & Emergency Systems
- Cellular Backhaul
- Video Surveillance
- Telemedicine
- E-Learning
- Banking

PTP 600

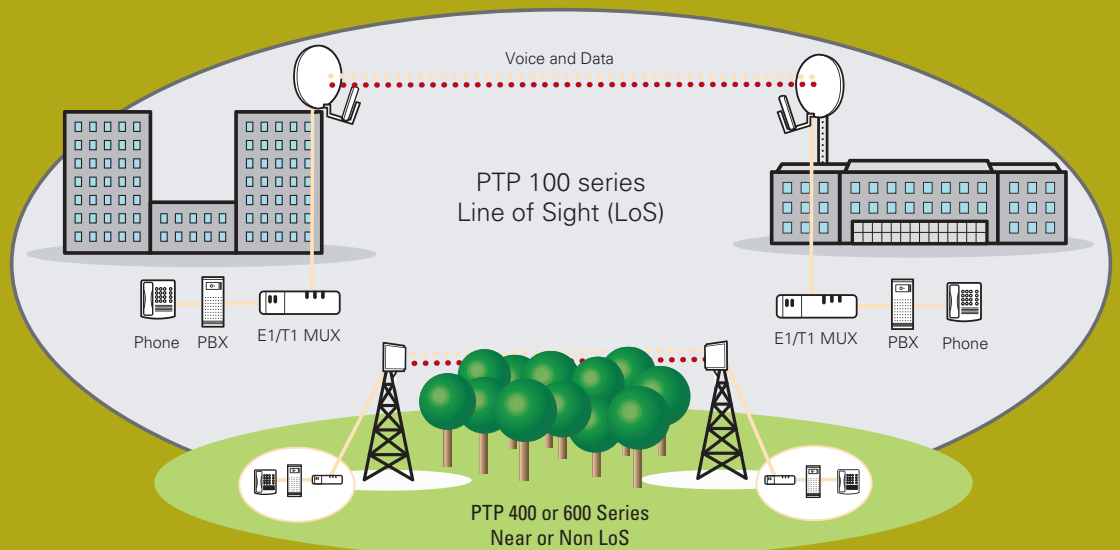
Frequencies	5.4* and 5.8 GHz
Range	LoS - Up to 124 Miles (200 Kilometers) nLoS - Up to 25 Miles (40 Kilometers) NLoS - Up to 6 miles (10 Kilometers)
Usable Throughput	Dynamically variable modulation ranges from 14 Mbps to 300 Mbps
Security	Proprietary Scrambling Technique
Technology	OFDM
Unique Features	<ul style="list-style-type: none">• Line-of-Sight• NON and Near Line-of-Sight• Carrier Class Reliability• Weather Resistant• Compact & Rugged Design• Dual Polarized Antennas• Integrated & Connectorized Antenna Options• Adaptive Modulation• Dynamic Frequency Selection• Transmit Diversity• Two Built in E1/T1s• Redundant Power Supplies• Optional Fiber Optic Data Module



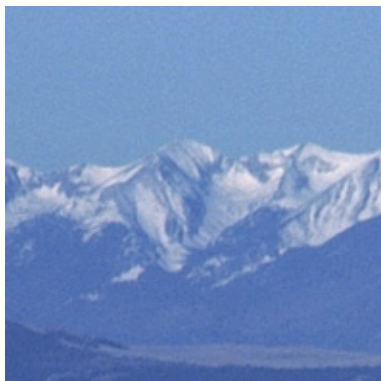
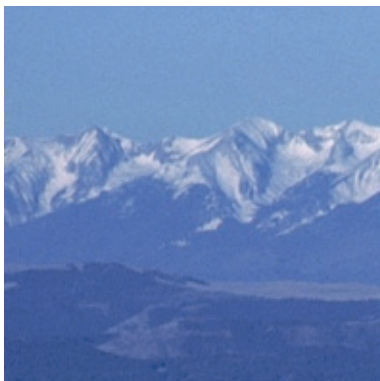
Ideal Applications

- Urban/Suburban Locations
- Fiber Replacement
- Uniting Campuses with High Bandwidth Requirements
- Backbone for Metro WiFi Networks
- Government Installations
- Temporary & Emergency Systems
- Cellular Backhaul
- Video Surveillance
- Telemedicine
- E-Learning
- Banking

E1/T1 Solutions for Carriers and Enterprise Applications







***Note:** The 5.4 GHz version of the PTP 400 and 600 Series devices have not been authorized as required by the rules of the Federal Communications Commission. These devices are not, and may not be, offered for sale or lease, or sold or leased in the United States, until authorization is obtained. These devices also are not authorized as required by Canada and may not be offered for sale or sold in Canada until authorization is obtained.

For more information and detailed specifications about the Motorola Point-to-Point Solutions, call 866-515-5825 in the U.S. 800-795-1530 internationally, visit us online at www.motorola.com/canopy or contact your Authorized Canopy Solution Provider.



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