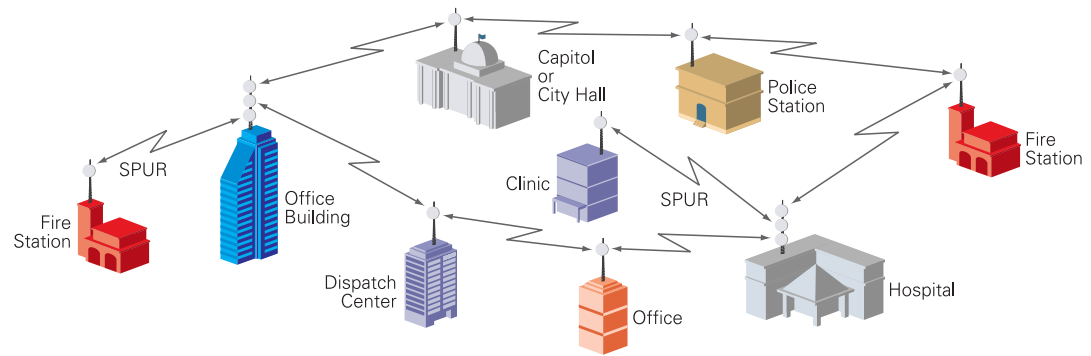




MOTOROLA WIRELESS BROADBAND

PTP 800 Licensed Ethernet Microwave

State and Local Government: Connect and Serve



Sample State or Local Government Deployment

Budget Cuts to U.S. Cities/Municipalities:

- Hiring freeze and/or layoffs 69%
- Delay/cancel infrastructure project 42%
- Across-the-board service cuts 22%
- Libraries, parks, events, etc. 20%
- Reworking health care plans 14%
- Public safety 6%
- Reworking pension plans 4%
- Human/social services 3%

National League of Cities (NLC), City Fiscal Conditions Survey, conducted December 2008 – January 2009

In addition to the day-to-day functions necessary to conduct government business, it is a primary goal of state and local governments to keep citizens secure in the knowledge that their service infrastructures, including water departments, police and fire stations, administrative offices and even educational institutions, can communicate effectively to dispense government services. With today’s communications comprising everything from water meter readings to traffic control and video surveillance, Internet usage is escalating dramatically, and video content is an increasingly greater percentage of that usage. As a result, bandwidth is in high demand and will continue to be for several years.

Challenging Times

For many communities, creating an always-accessible, high-bandwidth and future-proof infrastructure to support the wide variety of communications is a daunting task. With technology and bandwidth demand evolving rapidly, some government agencies have actually found themselves implementing solutions that became antiquated or were under-capacity – even before they were deployed. Constricting budgets and staffing reductions have limited the scope of projects that many government offices can consider. Plus, rural communities often find themselves severely lacking in broadband capabilities, leaving populations underserved and some with no broadband access at all.

Sure Solutions for Challenging Times

The broad scope and crucial nature of government communications necessitate reliable, high-performance, cost-effective and scalable broadband solutions. In response, Motorola developed its Point-to-Point (PTP) 800 Licensed Ethernet Microwave solutions to support the unique communications that state and local governments require and, at the same time, to address the challenges plaguing many government entities today.

Operating in the 6 to 38 GHz¹ radio frequency (RF) bands with up to 364 Mbps full-duplex throughput and user-configurable channel bandwidths from 7 to 56 MHz, PTP 800 radios are optimized to efficiently transmit data, voice and video communications, while giving budget-constrained agencies an affordable alternative. Plus, PTP 800 systems are optimized for fast installation, ease of use and efficient network management, recognizing that a number of agencies have limited staffs

¹ PTP 800 models operating in the 6 to 38 GHz frequencies will be available in a series of product releases.



Outdoor Unit



Compact Modem Unit

Advantage of Exclusivity

The most compelling reason to deploy a system in a licensed radio-frequency band is that you can obtain exclusive use of a slice of radio spectrum. With several RF bands becoming congested today, many state and municipal agencies prefer to deploy their systems in a licensed microwave band to obtain the highest possible level of communications reliability. PTP 800 systems can enable you to take full advantage of your licensed spectrum by delivering carrier-grade reliability.

Wireless Versatility

A growing number of organizations have become dissatisfied with the reliability, recurring charges, and quality of service and support they receive from wired networks. Outages from weather, equipment failures, accidents and other causes have motivated many government officials to seek cost-effective wireless redundancy and extensions for their wired networks. PTP 800 systems have the reliability and high-capacity needed to provide network redundancy and extensions to wireline and fiber networks. Plus, PTP 800 systems can be deployed in a fraction of the time and at a fraction of the cost of wired networks.

Capacity: How Much Is Too Much?

Throughput capacity is primarily driven by application requirements. Whether your applications are traffic signal monitoring, parking lot surveillance, inter-agency collaboration or backhaul communications, you want to obtain enough capacity but not more than you need to reduce your initial capital expenditures. With PTP 800 solutions, you can purchase only the capacity needed today and add capacity when you need it with no hardware changes.

Typical administrative applications:

- Wireless backbone
- Private data network
- Video surveillance
- Building-to-building connectivity
- Backhaul for a secondary ring
- Spur at the edge of the network
- Wired-network redundancy

Key Features:

- 6 to 38 GHz RF bands
- Carrier-grade reliability
- Up to 364 Mbps (full duplex)
- 7 to 56 MHz channel widths
- Adaptive Coding and Modulation
- "Pay as You Grow" throughput
- Easy, fast deployment
- Wind speed survival up to 150 mph (242 kph)
- Flexible network management
- Latency to < 115 us at full capacity

Invaluable Link Planning and Configuration

Motorola's PTP LINKPlanner tool lets you accurately predict link performance prior to purchase. With LINKPlanner you can plan and optimize a single link or multiple links simultaneously, conduct "what-if" scenarios and instantly see the effects of changes, obtain a detailed performance report and display your wireless network via Google™ Earth, all designed to decrease deployment man-hours and stress. Because many communities have major investments in tower infrastructures and want to amortize those investments, LINKPlanner lets you optimize your system with your existing towers. Once a link is optimized to your requirements, LINKPlanner's integrated configuration tool streamlines the purchasing process by giving you a complete licensed microwave Bill of Materials (BOM).

Connect with PTP 800 Solutions

Whether your agency needs to communicate between buildings, backhaul video cameras or provide broadband access for an underserved rural location, Motorola's PTP 800 Licensed Ethernet Microwave solutions offer the ease of use, cost reductions, uninterrupted service and high-bandwidth that you want to conduct day-to-day business and respond to special situations. With extensive experience working with all levels and sizes of government agencies, we have the expertise to help you configure and deploy the solution that best meets your objectives and budget. Plus, PTP 800 systems offer you an easy, smooth migration path to an all-IP-based network that will serve today's needs and grow to meet tomorrow's.

Motorola Wireless Broadband

PTP 800 solutions are part of Motorola's comprehensive portfolio of reliable and cost-effective wireless broadband solutions that, together with our WLAN solutions, provide and extend coverage both indoors and outdoors. The Motorola Wireless Broadband portfolio offers high-speed Point-to-Point, Point-to-Multipoint, Mesh, Wi-Fi and WiMAX networks that support data, voice and video communications, enabling a broad range of fixed and mobile applications for public and private systems. With Motorola's innovative software solutions, customers can design, deploy and manage a broadband network, maximizing uptime and reliability while lowering installation costs.



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