

# Motorola Wireless Broadband Point-to-Multipoint (PMP) Solutions



Reliable, Cost Effective Wireless  
Broadband Connectivity

# Wireless Inside & Out



Outside

Inside

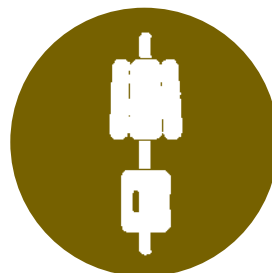


Point-to-point, high throughput IP connectivity

## Point-to-Point

Bridging enterprise locations & campuses

Backhauling cellular sites and Wi-Fi hotspots

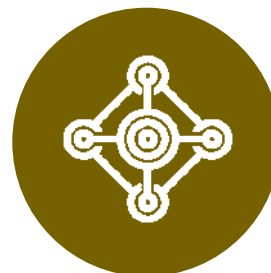


High-performing, broadband wireless access

## Point-to-Multipoint

Unlicensed frequencies

Fixed applications

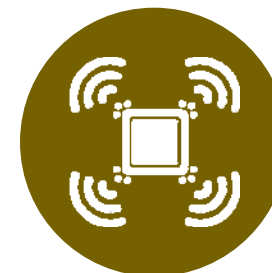


Secure connections over Wi-Fi, Wi-Max & public safety bands

## Mesh

Self-forming, highly available networks

Fixed and mobile applications



Enterprise wireless access solution

## 802.11 WLAN

Productivity and convenience

Mobility and portability applications

Within the Enterprise

# ***Reliable Service***



- **Industry Leading Interference Tolerance**
- **Environmentally Rugged**
- **Low Field Failure Rates**
- **Scalable to Sustain Performance as the Network Grows**
- **Applications:**
  - **Video Surveillance**
  - **Data Transfer**
  - **Voice over IP**



# *Cost Effective Connectivity*



- **Residential Connectivity**
  - 18 to 24 months ROI
- **T1 / E1 Connectivity**
  - 6 month ROI
  - Primary Service
  - Backup Service
- **Municipal Networks**
  - Public Safety
  - Public Works

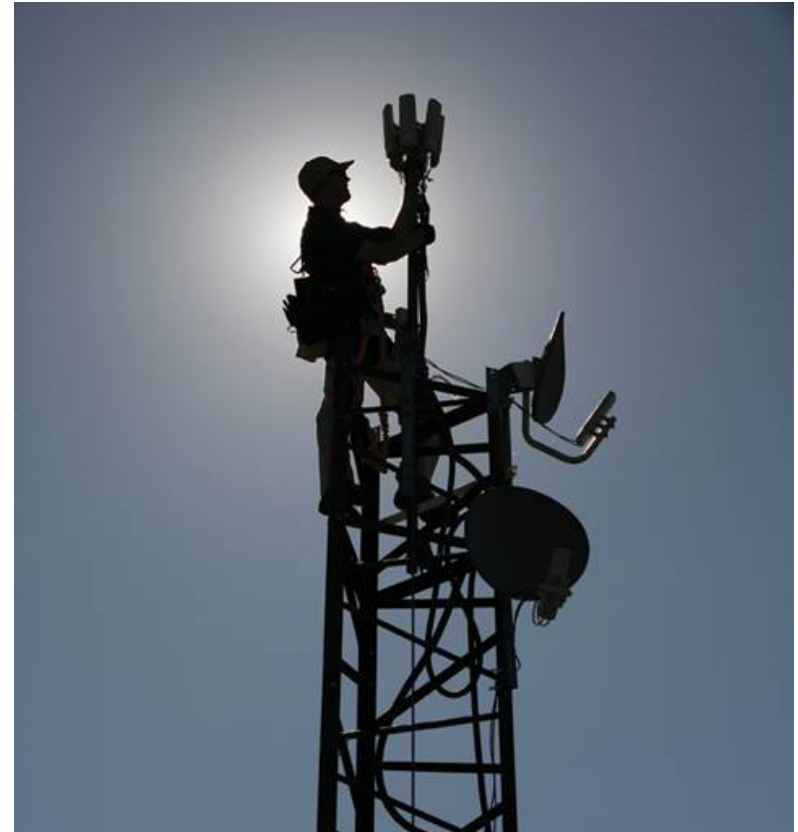


# *Proven Performance*

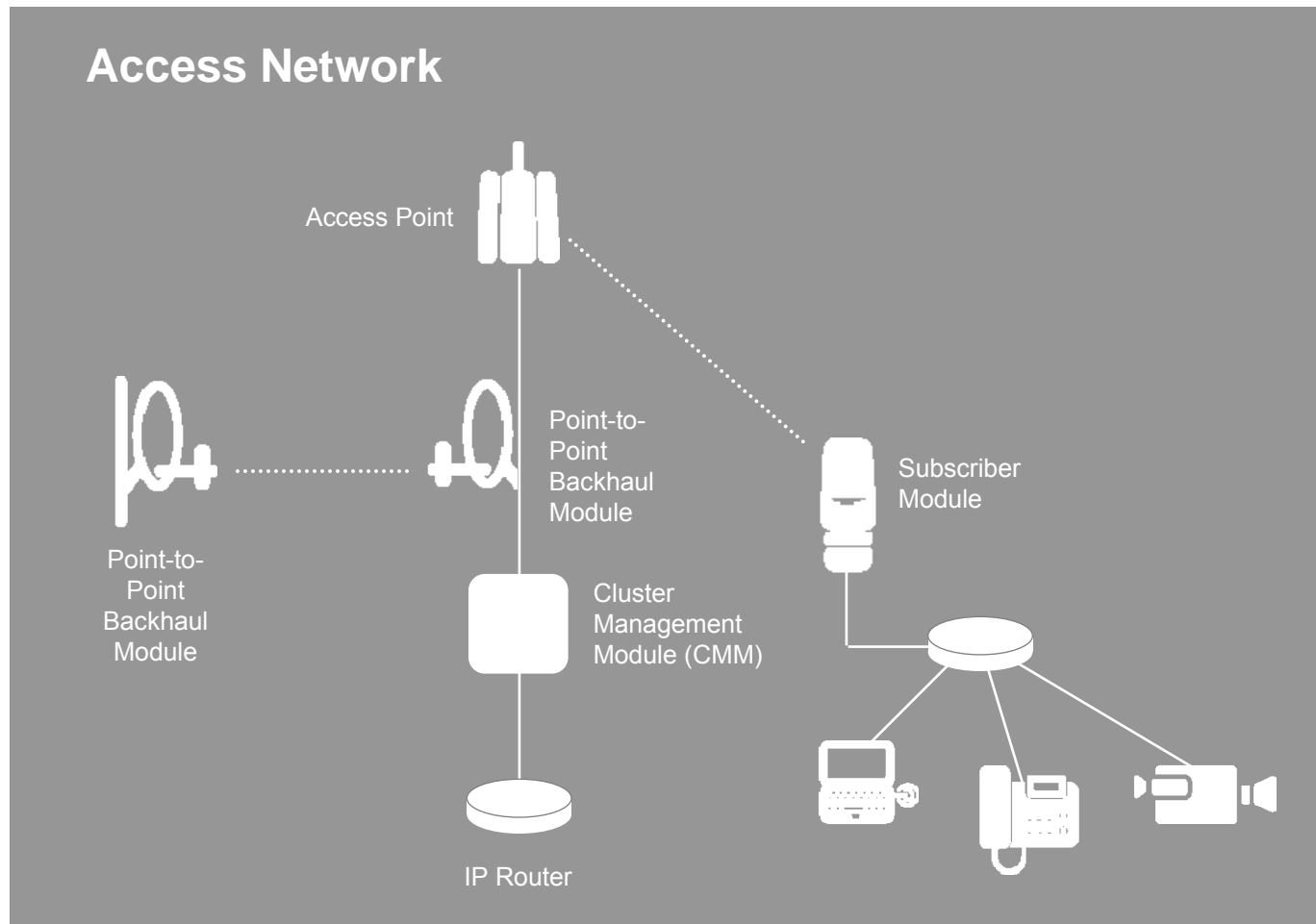
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- **Deployed in More than 4,000 networks**
- **More than 120 Case Studies**
- **Operating in 120+ Countries**
- **Reliable in Harsh Conditions**
- **Proven Reliability over Time**



# Reference Architecture



# PMP Options



<b>Point to Multipoint</b>				
	<b>Unlicensed</b>	<b>Licensed</b>	<b>Speed Mbps</b>	<b>nLOS</b>
<b>100 Series</b>	Y		<b>7 / 14</b>	
<b>400 Series</b>	Y	Y	<b>21</b>	Y
<b>500 Series</b>		Y	<b>13.5</b>	Y

# PMP 100 Series Overview



- **2.4, 5.1, 5.2, 5.4, 5.8 and 6.0 GHz bands**
- **Up to 14 Mbps Ethernet data rate**
- **Range**
  - 14 Mbps to 1 mile LOS
  - 7 Mbps to 2 miles LOS
- **Robust security**
  - unique scrambling
  - optional 128/256-bit AES
- **Small footprint**
- **Easy to deploy and use**





# PMP 400 Series Overview



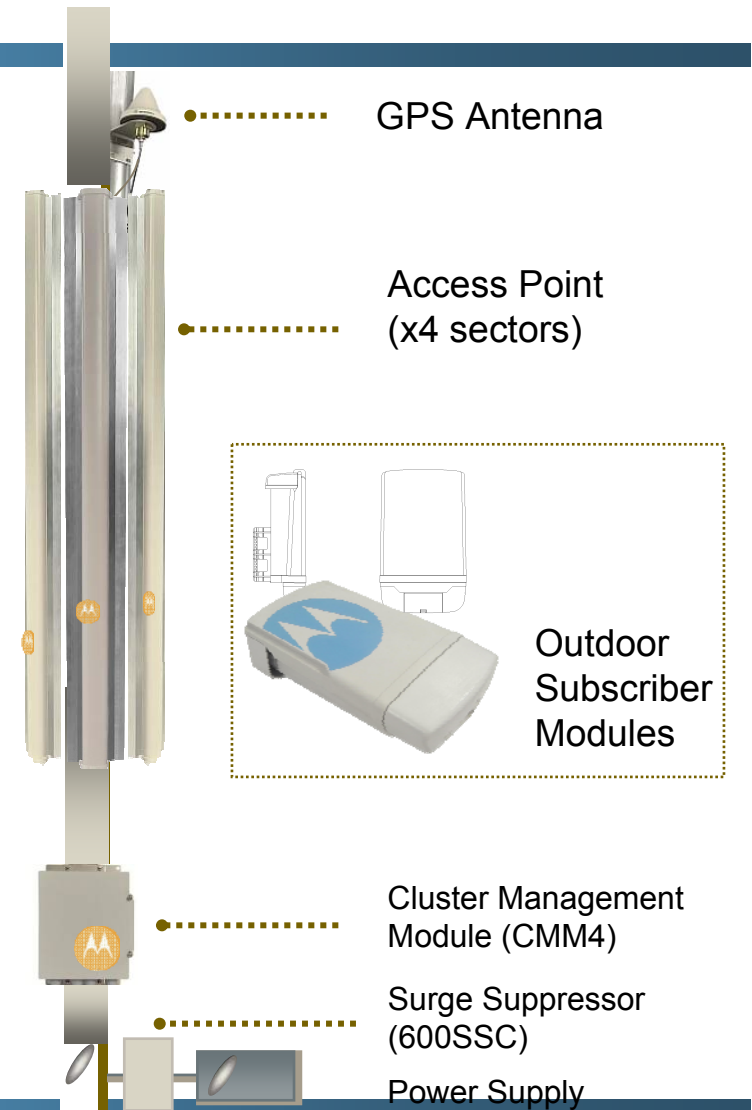
- 4.9 GHz licensed band for public safety
- 5.4 GHz unlicensed bands
- Up to 21 Mbps Ethernet data rate
- LOS and nLOS performance
- Range
  - 21 Mbps to 1.5 miles
  - 14 Mbps to 4 miles
  - 7 Mbps to 8+ miles
- Small footprint
- Easy to deploy and use



# PMP 500 Series Overview



- 3.5 GHz licensed bands
- Up to 13.5 Mbps Ethernet data rate
- LOS, NLOS and nLOS performance
- Range
  - 13.5 Mbps to 4 km
  - 9 Mbps to 10 km
  - 4.5 Mbps to 40 km
- Small footprint
- Easy to deploy and use



# Leader in Wireless Broadband



	100 Series	400 Series	500 Series
900 MHz	●		
2.4 GHz	●		
3.5 GHz			●
4.9 GHz		●	
5.1 GHz	●		
5.2 GHz	●		
5.4 GHz	●	●	
5.7 GHz	●	○	
5.9 GHz	●		

# ***Industry Leading Solution***

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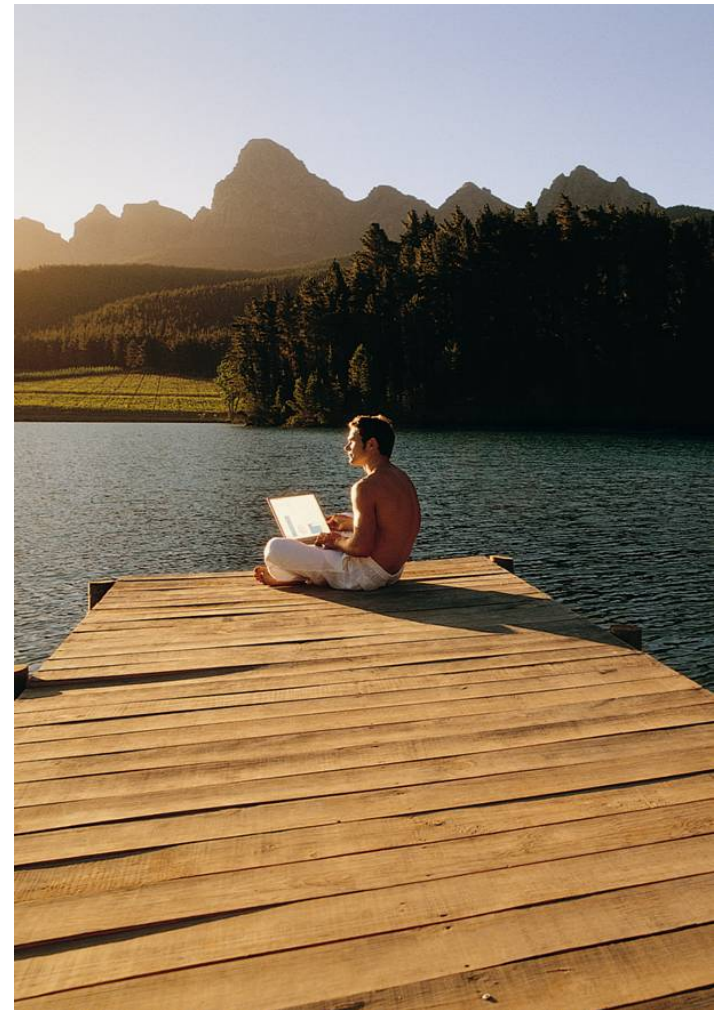


- **GPS Synchronized Network enables scalability of services**
- **Optimized for high reliability in the presence of interference**
- **Industry Leading Self Interference Mitigation provides reliable service in outdoor unlicensed spectrum**
- **Deployed in more than 4,000 networks in 120 countries around the world**
- **Reliable hardware with low field failure rate minimizes total cost of ownership**
- **Deployed as access network or as infrastructure for mesh or WLAN access network**

# *The Motorola Advantage*



- **Experience and Expertise in Wireless**
- **Globally Proven Coverage Solutions**
- **Broad Array of Technology Choices**
- **Rich Portfolio of Service Solutions**
- **Relentless Focus on Quality**



*Motorola Wireless Broadband*

# *Motorola Wireless Broadband*

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## *Complete Broadband Coverage*

