



# Micro-cell Wireless

## The New Solution for Hospitality, Healthcare, and MDU



Motorola introduces the first micro-cell wireless architecture designed for hospitality, healthcare, and MDU markets.

Different construction techniques and building materials present challenges to the successful transmission of RF signals. For example; silvered mirrors, reinforced concrete, and fire-rated access doors block or deflect 40% to 100% of RF energy.

In a traditional WiFi network, high powered wireless access points are installed in a central location such as the hallway corridor or staff closet. This topology leads to null spots in coverage, load utilization issues, and can require extensive site surveys.

**Maximize Wireless Coverage**

**Maximize Guest / Patient Satisfaction**

**Minimize Cost to Install and Maintain**

Motorola Solution

Wireless energy needs to be where the user is located - in the room. A micro-cell architecture distributes multiple low-powered access points throughout the building over the existing telephone infrastructure. Coverage is assured, and utilization load is inherently distributed among multiple micro-cells.

Automatic RF management harmonizes the transmitters; preventing RF signal saturation while eliminating null spots and service outage due to inadequate signal levels.



Micro-cell technology in the MC-802 ushers in a new installation and maintenance paradigm. The MC-802 attaches to the existing wired infrastructure, providing wireless and wireline connectivity. Leveraging the successful T3 PowerBroadband System, the MC-802 is line powered over a single pair of twisted telephone wire.

**Any property can  
immediately benefit from  
micro-cell wireless**

- o *Inherent load balancing and higher aggregate throughput*
- o *Automatic channel selection*
- o *Transmitter power harmonization*
- o *Eliminates extensive site surveys*
- o *Dramatically improves installation time*
- o *Decreases maintenance visits*

### Seamless Design

Patented Adaptive Line Power provides operating power to the MC-802 WallPlate over any single pair of telephone wire. Power, backhaul data, and analog telephone signals all share the same wire, transparent to one another. This seamless design allows installation in as little as one minute. Any hospitality property can immediately benefit from micro-cell technology.

### Specifications

Line powered from T3 PowerBroadband Switch  
up to 1000ft

Up to 75Mbps/10Mbps backhaul line rate

802.11b/g radio

2 x 10/100Mb Ethernet ports

Centralized management

- o Configure WallPlate AP from one login
- o Firmware management with backup image and realtime upgrade
- o Automatic RF balancing with manual control
- o Channel selection, Tx power in 1db increments

Other radio parameters

- o Rogue AP detection, configurable scanning
- o Detailed client statistics and status

### MobilityDuo Firmware

Site surveys and careful positioning of wireless access points are eliminated by micro-cell management. MobilityDuo firmware, running on the T3 PowerBroadband Switch automatically selects the proper 2.4Ghz channel, and adjusts transmitter power in single dB increments. Proactive monitoring and management provides failover, 100% coverage, and rogue AP detection for optimal performance.

### Security Protocols

- o Wireless client isolation
- o 802.1x, EAP TLS/TTLS/PEAPv0, md5
- o WEP, WPA, WPA2, WPA2-Enterprise
- o AES, TKIP encryption

Virtual APs with per SSID (16 BSS)

- o 802.1Q VLAN
- o Client isolation
- o Authentication
- o Encryption
- o QoS with WMM voice priority
- o Bitrate



**T3 PowerBroadband Switch**



**MC-802 Wireless WallPlate**



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