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Mobility Point® MP-82

PRODUCT BRIEF

Mobility Point MP-82

802.11n dual-radio 2x3 MIMO indoor access point designed for high-density deployments requiring maximum capacity.

Fast Facts

The MP-82 is an enterprise-class 802.11n indoor access point designed for high-density deployments that emphasize throughput capacity over coverage. The MP-82 contains dual radios; one operating in the 2.4 GHz band and one in the 5 GHz band, with each radio supporting 2x3 operation (two transmit chains and three receive chains).

To protect the customer's investment in legacy 802.11 clients, and to ease the transition to 802.11n, the MP-82 is backwards compatible with legacy 802.11a/b/g clients in both the 2.4 GHz and 5 GHz bands. With 6 built-in internal antennas, the MP-82 provides omni-directional coverage without unsightly and insecure "rabbit ear" antennas.

Connectivity and Power Options

The MP-82 features one 10/100/1000 Ethernet port operating in auto-negotiation mode in order to seamlessly adapt to the Ethernet infrastructure. To protect your investment in existing PoE infrastructure, the MP-82 is designed to allow full operation with existing standards-based 802.3af PoE infrastructure. The MP-82 is also compatible with the newer high-power 802.3at PoE, but this is not required for full operation.

Compliance and Security

The MP-82 is compliant with the IEEE 802.11n Draft 2.0 standard, software upgradeable to the final standard, and tested extensively for interoperability with 802.11n clients and legacy 802.11 a/b/g clients. The MP-82 supports all relevant encryption methods including WPA2 (Wi-Fi Protected Access 2 based on 802.11i), WPA (Wi-Fi Protected Access), in both Enterprise (802.1X) and Personal (pre-shared key) modes. The MP-82 does not store data, encryption keys or security credentials locally and poses no security risk to the organization if stolen.

Compatibility

The MP-82 is compatible with all generations of Trapeze Networks Mobility Exchange WLAN controllers, and can be deployed without any hardware upgrades to the installed base of controllers.

Reliability

As part of the Smart Mobile system, the MP-82 features NonStop reliability. If a WLAN controller fails, the AP will seamlessly failover to another controller and maintain the wireless networking session.

Installation

The MP-82 ships with a flexible mounting kit that supports ceiling-mounted, wall-mounted, and desktop-mounted deployment. Its aesthetically-appealing enclosure is designed specifically to blend into typical office environments, minimizing attention to it's function. Furthermore, the MP-82 features a built-in Kensington lock system for added physical security.

Special Smart Mobile Features

Smart Mobile distributed traffic forwarding can be enabled in the MP-82, resulting in optimized traffic flow, reduced latency, and enhanced scalability. In addition to traditional access point functionality, the MP-82 also serves as a Mesh AP, or Wireless Distribution System (WDS) Bridge to extend the reach of enterprise WLANs where cabling can-not reach or is not desired.

Additional Product Information

This product brief provides highlights about this product. Please consult the full MP-82 data sheet and MSS data sheet for additional information. All product data sheets can be downloaded from our website on: www.trapezenetworks.com/products

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Radios
Dual Radios:
- 802.11a/n (5 GHz) and 802.11b/g/n (2.4 GHz) concurrent operation

Internal Antenna:
- Optimized for 802.11n spatial diversity
- True omni-directional antenna allows position-independent placement

Radio transmit power setting:
- Granular Transmit Power Settings in single dBm increments
- Configurable power allows control of RF cell size

Reliability
RF Auto-Tuning:
- Self-tuning for optimal channel, data rate and transmit power
- Eliminates coverage holes if adjacent APs go out of service

Scalability
Clients:
- Supports up to 500 simultaneous clients

Encryption:
- Dedicated hardware-based line-rate encryption for certified operation of WPA (TKIP), WPA2, (AES), 40-bit WEP, 128-bit WEP, and Dynamic WEP with per session rotating keys

802.11n
- 2 x 3 MIMO (2 Radio Transmit and 3 Radio Receive chains) with two spatial streams
- 20 MHz and 40 MHz channels
- PHY data rates up to 300 Mbps per radio.
- Adaptive Frame Aggregation [L2 (MPDU Aggregation) and L3 (MSDU Aggregation)
- Maximal Ratio Combining
- Cyclic Delay Diversity (CDD)

Security
Physical Security:
- Inconspicuous design with tamper-proof internal antennas
- No data, security credentials or encryption keys stored locally - completely safe if stolen
- No console port; no local access possible
- Stolen AP can be "blacklisted"
- Integrated Kensington security lock

WIDS/WIPS:
- Either radio can be configured independently for ActiveScan or SentryScan

Installation
Mounting:
- One snap invisible ceiling grid attachment
- Supports ceiling-mounted, wall-mounted and desktop-mounted deployment

Powering:
- Any Trapeze Networks Mobility Exchange WLAN Controller with PoE
- Any PoE-enabled switch or mid-span power injector

RF Planning:
- Outage resiliency planning for RF Auto-Tuning using RingMaster®

Hardware Specifications
Dimensions:
- Length: 7.8 inches (20 cm)
- Width: 7.8 inches (20 cm)
- Height: 1 inches (2.56 cm)
- Weight: 1 kg (2.2 lb)

Interfaces:
- One RJ-45 port for 10/100/1000 Mbps Ethernet and Standard IEEE 802.3af Power-over-Ethernet (PoE)

Environmental:
- Operating temp: 0°C to 40°C (32°F to 104°F)
- Storage temp: -25°C to 70°C (-4°F to 158°F)
- Humidity: 10% - 95% (non-condensing)

Status Indicators:
- 4 LEDs: Power, LAN, Radio 1, and Radio 2, indicate activity and various states

Regulatory Compliance
Safety:
- UL 60950-1, 1st Edition
- CAN/CSA C22-2 No. 60950-1-03
- CB Scheme to IEC 60950-1 1st Edition
- EU Low Voltage Directive 2006/95/EC

Environmental:
- WEEE: EU Directive 2002/96/EC
- EU Directive 2002/95/EC, 2006/122/EC

Other:
- EN60601-1-2 (2001): Medical Device Harmonized Standard
- Medical Directive 93/42/EEC
- EU: ETSI EN301 893, EN301 489-1 and -17
- EU: R & TTE Directive 1999/5/EC
- EMC Directive 2004/108/EC
- FCC Part 15, Class B
- ICES-003, Class B
- AS/NZS 4268

DFS2 and DFS3:
- EN 301 893 v 1.5.1

Standards Compliance
IEEE:
- 802.3i: 10BASE-T Ethernet, 802.3u: 100BASE-TX Fast Ethernet, 802.3ab: 1000 BASE-TX Gigabit

Power over Ethernet:
- Ethernet, 802.3af: Power over Ethernet, 802.3af+: (pre-standard 802.3at)

Network Access:
- 802.11a, 802.11b, 802.11g and 802.11n
- 802.11d, 802.11e, 802.11h, 802.11i, 802.11k
- 802.1X Control and Mutual Authentication

Wireless LAN:
- 802.11e Quality of Service (QoS) (WMM), Call Admission Control (TSPEC), Unscheduled Automatic Power Save Delivery (U-APSD), 802.11i Fast Roaming (PMK Caching), encryption (AES/CCMP and TKIP), Wi-Fi Protected Access (WPA) and Wi-Fi Protected Access 2 (WPA2), Wi-Fi Multimedia (WMM) & Wi-Fi Multimedia Power Save (WMM-PS)

IETF:
- IETF CAPWAP WG Taxonomy and Architecture compatibility

Mobility System Software™
The MP-82 uses the same Mobility System Software™ as all other Trapeze Mobility Points. For more information about the security and networking capabilities of the MP-82, please read the Mobility System Software datasheet.

Ordering Information
Part number: