

MOBILITY POINT™ MP-620™

The Trapeze Mobility Point (MP™) family of multi-function outdoor access points provides access point, mesh access point, mesh portal, point-to-point and point-to-multipoint wireless services for Trapeze Smart Mobile™ wireless networks. Smart Mobile is the only WLAN architecture with intelligent switching, which combines both centralized and distributed data forwarding based on the requirements of the underlying application. Configured and controlled by Trapeze Mobility Exchange™ (MX™) controllers, MPs perform encryption and can also enforce policy and forward data, depending on the application needs. The result is optimized traffic flow, radically reduced latency, and massive scalability.

Smart Mobile WLANs can support the most demanding wireless applications indoors and outdoors, including voice over WLAN for thousands of users, and are 802.11n ready without the need for expensive controller upgrades.

The Trapeze Networks outdoor MP-620™ is a dual radio 802.11a and 802.11b/g access point that features 10/100 Fast Ethernet connectivity and 802.3af power over Ethernet (PoE). The MP-620 complements Trapeze indoor MPs by delivering the same rich enterprise class feature set, with the same operations model, outdoors. With Smart Mobile technology, WLAN coverage and secure mobility can now be extended across the campus, enabling wireless users to stay connected as they roam from building to building. The MP-620 also features a weatherized package suitable for extreme outdoor environments and a built-in lightning arrestor. A variety of external antenna options ensure that the RF coverage area can be tailored to meet access requirements.

In addition to traditional access point functionality, the MP-620 can also serve as an 802.11s Mesh AP, Mesh Point, Mesh Portal, or WDS Bridge to extend the reach of enterprise WLANs. Furthermore, the MP-620 can support such functionality in either point-to-point or point-to-multipoint topologies, allowing maximum flexibility within a mesh or bridged environment. In mesh portal mode, the MP-620 acts as the gateway node to the wired network, advertises services to mesh access point nodes, and enforces firewall, access and quality of service (QoS) policy, simultaneously performing broadcast suppression—all of which serve to optimize RF spectrum utilization in the mesh. The MP-620 can be configured with one radio for client services and the other for mesh service. Smart Mobile intelligent switching is supported in all mesh modes, enabling each mesh node to provide the shortest, least congested path to the destination over encrypted secure mesh links. The MP-620 can also be used in a dedicated bridging mode, to provide seamless connectivity between buildings without the expense of laying new cable. Advanced features such as mesh, bridging and distributed forwarding require MSS 6.0 or above.

The MP-620 can be configured with one radio for client services and the other for wireless backhaul or mesh service, or in any hybrid combination desired in either the 2.4 GHz or 5 GHz bands. Smart Mobile intelligent switching is supported in all mesh modes, enabling each mesh node to provide the shortest, least congested path to the destination over encrypted secure mesh links.

The MP-620 is simple to deploy and easy to manage. It is supported by Trapeze RingMaster™ WLAN management software in the same way as any MP in the Trapeze Mobility System™. It supports RF Auto-tune outdoors, automatically calculating the data integrity and RF signal strength of the wireless channel and continually tuning for optimal RF channel and transmit power, while enforcing the prioritization of delay-sensitive voice and other critical applications. Wi-Fi Multimedia (WMM) or SpectraLink Voice Priority (SVP) can be configured to ensure optimal QoS for voice traffic. Policies allow per user, protocol or class-of-service (CoS) mapping.

The MP-620 plays a key role in rogue and intrusion detection as well as denial-of-service (DoS) attack detection. ActiveScan™ allows MPs to fulfill a dual role. They scan all 802.11 bands, channels and VLANs while simultaneously providing wireless connectivity to mobile clients. SentryScan™ allows MPs or individual MP radios to act as dedicated sentries, providing nonstop scanning.



Key Features

RADIO	
Dual-Radio	<ul style="list-style-type: none"> • 802.11a (5GHz) and 802.11b/g concurrent operation
Transmit Power	<ul style="list-style-type: none"> • Granular Transmit Power Settings™ in 1 dBm increments • Configurable individual 802.11 channel support control RF cell size
RF Auto-Tune	<ul style="list-style-type: none"> • Continuous self-tuning for optimal channel and transmit power • Self-tuning factors-in client data integrity when optimizing RF settings • Eliminates dynamic and unplanned coverage holes
MOBILITY SERVICES	
Voice with Quality of Service	<ul style="list-style-type: none"> • Prioritized per user and per session priority queuing • Wi-Fi Multimedia (WMM) QoS • SpectraLink Voice Priority (SVP) QoS • Voice qualified seamless handoff with 802.11i PMK cached roaming • Session based bandwidth reservation with 802.11e TSPEC CAC • Neighbor Report advertisement with 802.11k • Unscheduled Power Save delivery with 802.11e U-APSD • Per session AP load balancing and client steering
Virtual Service Sets	<ul style="list-style-type: none"> • Up to 64 SSIDs per Mobility Point • Any mix of encryption and authentication type per SSID • Any VLAN topology per SSID • Unique WebAccess Portal per SSID • Private or shared authentication
Wireless Backhaul	<ul style="list-style-type: none"> • Point-to-point (P-P) and Point-to-Multipoint (P-MP) operations
Wireless Bridging	<ul style="list-style-type: none"> • Point-to-point (P-P) and Point-to-Multipoint (P-MP) operations
Enterprise Ethernet Mesh Service	<ul style="list-style-type: none"> • Self Configuring, self healing, and self optimizing mesh service • Mesh portal operation • Mesh access point operation
SECURITY	
Physical Security	<ul style="list-style-type: none"> • No local data store • No console port; no local access is possible • If stolen, no secure configuration data goes with it
Encryption	<ul style="list-style-type: none"> • Dedicated hardware based air-rate encryption support for certified operation of WPA2 (AES), WPA (TKIP), WPA-PSK, 40-128-bit dynamic WEP with per session rotating keys
Wireless Intrusion Detection (WIDS) and Protection (WIPS)	<ul style="list-style-type: none"> • ActiveScan simultaneous rogue and denial-of-service (DoS) attack detection, alarming and mitigation. • SentryScan dedicated rogue and denial-of-service (DoS) attack detection, alarming and mitigation.

MANAGEMENT AND CONTROL
Scalability and Resiliency

- Supports up to 500 simultaneous clients
- Direct Data Path Forwarding™ enables local switching of data traffic in the Mobility Point or forwarding of data to Mobility Point
- Dedicated hardware based encryption support
- Dual attached power-over-ethernet (PoE) with redundant network link
- RingMaster based outage resiliency planning for RF Auto-Tune

Intelligent Switching

- MP configured for simultaneous direct data path distributed switching, or centralized switching depending on the needs of the application
- Optimizes traffic flow for radically reduced latency and massive scalability
- Optimizes network capacity, performance and utilization
- Optimizes MX traffic loading, capacity, performance and utilization
- Management, control and configuration retained in MX

Installation and Configuration

- Zero configuration installation with no pre-staging
- One-snap invisible ceiling grid attachment
- Mobility Point configured by MX
- True omni-directional antenna allows position independent placement

Client Load Balancing

- Equalize client sessions accross groups of MPs with like Service Policies
- Restore equality of session load accross groups of MPs with like service profiles when new MPs are added or an MP returns from transient outage
- Equalize balanced group of MPs accross multiple MXs in a Mobility Domain
- Client steering accross 802.11a/b/g bands to maximize usage and consistently balance load over the available spectrum

Specifications

HARDWARE SPECIFICATIONS
Dimensions (HxWxD)

- 7.8 in (198.1 cm) x 7.8 in (198.1 cm) x 2.76 in (70 cm)

Weight

- 3.53 lbs (1.6 kg)

Interfaces

- 10/100 Fast Ethernet port for unshielded twisted pair (UTP) connectivity on ruggedized 8-pin DIN connector with power-over-ethernet (PoE) provided by supplied POE injector; and supplied 50-meter 8-pin DIN to RJ-45 cable
- Two External N-type female connectors for external 802.11a (5GHz) and 802.11b/g (2.4 GHz) antennas (ordered seperately)

Environmental

- Operating temperature: -30°C to 55°C
- Storage temperature: -30°C to 55°C
- Humidity: 15% - 95% (non-condensing)

Power

- -48 VDC, 1.2 Arms, 30 watts peak during dual-radio operation
- External auto-sensing POE injector (NOT 802.3af compliant)
- Input: 100-240 VAC, 1.5 Arms Output: 48 VDC, 1.2 Arms

Status Indicators

- Power ON/OFF provided on external power injector

802.11 A RADIO SPECIFICATIONS

Operating Frequency	• 5 GHz to 5.85 GHz
Operating Channels	• Based on configured regulatory domain
Modulation	• Orthogonal Frequency Division Multiplexing (OFDM)
Transmit Power	• Based on configured regulatory domain
Configurable Association Rates	• 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, and 6 Mbps with automatic fallback

802.11 B RADIO SPECIFICATIONS

Operating Frequency	• 2.4 GHz to 2.484 GHz
Operating Channels	• Based on configured regulatory domain
Modulation	• Direct-Sequence Spread-Spectrum (DSSS)
Transmit Power	• Based on configured regulatory domain
Configurable Association Rates	• 11 Mbps, 5.5 Mbps, 2 Mbps, and 1 Mbps with automatic fallback

802.11 G RADIO SPECIFICATIONS

Operating Frequency	• 2.4 GHz to 2.484 GHz
Operating Channels	• Based on configured regulatory domain
Modulation	• Orthogonal Frequency Division Multiplexing (OFDM)
Transmit Power	• Based on configured regulatory domain
Configurable Association Rates	• 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, and 6 Mbps with automatic fallback

Compliance

REGULATORY COMPLIANCE

Safety and Electromagnetic Compliance	<ul style="list-style-type: none"> • UL listed (UL 60950-I) • UL listed (Canadian Electrical Code CSA 22.2 No. 60950-I) • EN60950, IEC60950-I (CB) • National Electric Code Section 300-22 (C) • Canadian Electrical Code Part I, CSA 22.1 Sections 2-128, 12-010 (3), and 12-100 • ETS 300.328 (2.4 GHz) and 301.893 (5 GHz) • FCC Part 15B Class B, FCC Part 15C 15.207/15/247, FCC Part 15E 15.407 • ICES-003 Class B • RSS210 • R&TTE Directive 1999/EC • EN 610003, EN6100042, EN6100043, EN6100044, EN6100045, EN 6100046, EN 6100048, EN 61000411 • VCCI Class B • 73/23/EEC and 89/336/EEC • EN55022, EN55024 (89/336/EEC) • ETS 300 328 (89/336/EEC), ETS 310 489 (89/336/EEC) • ETS 301 893 • N/NZS 3548/4268/4771 Class B • IEC 60529 IP68/NEMA250 6P
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STANDARDS COMPLIANCE

- 802.3i 10BASE-T Ethernet
- 802.3u 100BASE-TX Fast Ethernet
- 802.1X Network Access Control and Mutual Authentication
- 802.11 a, 802.11 b, 802.11 g Wireless Ethernet
- 802.11 e quality of service (QoS)(WMM), call admission control (TSPEC), unscheduled power save delivery (U-APSD)
- 802.11 i Fast Roaming (PMK Cache), encryption (AES/CCMP and TKIP)
- Wi-Fi Alliance Protected Access 1.0 (WPA) and 2.0 (WPA2)
- Wi-Fi Alliance Multimedia (WMM)
- IETF CAPWAP WG Taxonomy and Architecture compatibility

ORDERING INFORMATION

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| MP-620 | <ul style="list-style-type: none"> • Outdoor MP with dual-radio 802.11 a and 802.11 b/g with 10/100 Fast Ethernet, external PoE injector; 50 m 8-pin DIN to RJ-45 Ethernet cable, and female N-Type connectors for 802.11 a (5 GHz) and 802.11 b/g (2.4 GHz) external antennas. (Sold separately) |
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OPTIONAL ACCESSORIES

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| ANT-I120-OUT | <ul style="list-style-type: none"> • 120° outdoor 802.11 b/g sector antenna for MP-620, 10dB gain – 2400-2500 MHz, includes 3 m M/M N-Type cable, mounting hardware |
| ANT-I360-OUT | <ul style="list-style-type: none"> • 360° outdoor 802.11 b/g sector antenna for MP-620, 8dB gain – 2400-2500 MHz, N-Type connector; mounting hardware |
| ANT-5120-OUT | <ul style="list-style-type: none"> • 120° outdoor 802.11 a sector antenna for MP-620, 13.5dB gain – 5150-5875 MHz, includes 3 m M/M N-Type cable, mounting hardware |
| ANT-5360-OUT | <ul style="list-style-type: none"> • 360° outdoor 802.11 a sector antenna for MP-620, 8dB gain – 5470-5875 MHz, N-Type Connector; mounting hardware |
| ANT-5PNL-OUT | <ul style="list-style-type: none"> • 18° outdoor 802.11 a panel antenna for MP-620, 18dB gain – 4900-5875 MHz, includes 3 m M/M N-Type cable, mounting hardware |
| ANT-LGTNG-A | <ul style="list-style-type: none"> • MP-620 lightning protection kit for outdoor antenna installations F/F Type N Bulkhead, 0-6 GHz range with .3 m M/M Type N cable and grounding attachment , mounting hardware |

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Trapeze Networks, the Trapeze Networks logo, Smart Mobile, Mobility Exchange, MX, Mobility Point, MP, Mobility System Software, MSS, RingMaster, Mobility Domain, SentryScan, ActiveScan, Bonded Auth, FastRoaming, Granular Transmit Power Setting, GTPS, Layer 3 Path Preservation, Location Policy Rule, Mobility Profile, Passport Free Roaming, Time-of-Day Access, TAPA, Trapeze Access Point Access Protocol, Virtual Private Group, VPG, Virtual Service Set, Virtual Site Survey and WebAAA are trademarks of Trapeze Networks, Inc. Trapeze Networks SafetyNet is a service mark of Trapeze Networks, Inc. All other products and services are trademarks, registered trademarks, service marks or registered service marks of their respective owners.