

MOBILITY POINT™ MP-620A

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-620A is a dual radio 802.11a and 802.11b/g access point. The MP-620A 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-620A radios are housed in ruggedized enclosures designed for outdoor deployment in extreme weather conditions. 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-620A 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-620A 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-620A 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-620A 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-620A 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-620A 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-620A 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-620A 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 across groups of MPs with like Service Policies
- Restore equality of session load across groups of MPs with like service profiles when new MPs are added or an MP returns from transient outage
- Equalize balanced group of MPs across multiple MXs in a Mobility Domain
- Client steering across 802.11a/b/g bands to maximize usage and consistently balance load over the available spectrum

Specifications

HARDWARE SPECIFICATIONS
Dimensions (HxWxD)

- 7.8 in (19.81 cm) x 7.8 in (19.81 cm) x 2.76 in (7.0 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 separately)

Environmental

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

Power

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

Status Indicators

- Power ON/OFF provided on external power injector

802.11a RADIO SPECIFICATIONS

Operating Frequency	<ul style="list-style-type: none"> • 5 GHz to 5.85 GHz
Operating Channels	<ul style="list-style-type: none"> • Based on configured regulatory domain
Modulation	<ul style="list-style-type: none"> • Orthogonal Frequency Division Multiplexing (OFDM)
Transmit Power	<ul style="list-style-type: none"> • Based on configured regulatory domain
Configurable Association Rates	<ul style="list-style-type: none"> • 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, and 6 Mbps with automatic fallback
Radio Approvals	<ul style="list-style-type: none"> • USA: 47CFR(FCC) Part 15.407 • Canada: IC RSS-210, Issue 6 • EU: ETSI EN301 893, EN301 489-1 and -17, EN301 893 v1.3.1 • Japan:TELEC ARIB STD-70 (per the new W52/W53 requirements)

802.11b RADIO SPECIFICATIONS

Operating Frequency	<ul style="list-style-type: none"> • 2.4 GHz to 2.484 GHz
Operating Channels	<ul style="list-style-type: none"> • Based on configured regulatory domain
Modulation	<ul style="list-style-type: none"> • Direct-Sequence Spread-Spectrum (DSSS)
Transmit Power	<ul style="list-style-type: none"> • Based on configured regulatory domain
Configurable Association Rates	<ul style="list-style-type: none"> • 11 Mbps, 5.5 Mbps, 2 Mbps, and 1 Mbps with automatic fallback
Radio Approvals	<ul style="list-style-type: none"> • USA: 47CFR(FCC) Part 15.247 • Canada: IC RSS-210, Issue 6 • EU: ETSI EN300 328-2, EN301 489-1 and -17 • Japan:TELEC RCR STD 33B,ARID STD-T66

802.11g RADIO SPECIFICATIONS

Operating Frequency	<ul style="list-style-type: none"> • 2.4 GHz to 2.484 GHz
Operating Channels	<ul style="list-style-type: none"> • Based on configured regulatory domain
Modulation	<ul style="list-style-type: none"> • Orthogonal Frequency Division Multiplexing (OFDM)
Transmit Power	<ul style="list-style-type: none"> • Based on configured regulatory domain
Configurable Association Rates	<ul style="list-style-type: none"> • 54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, and 6 Mbps with automatic fallback
Radio Approvals	<ul style="list-style-type: none"> • USA: 47CFR(FCC) Part 15.247 • Canada: IC RSS-210, Issue 6 • EU: ETSI EN300 328-2, EN301 489-1 and -17 • Japan:TELEC RCR STD 33B,ARID STD-T66

Compliance

STANDARDS COMPLIANCE

- 802.3i 10BASE-T Ethernet
- 802.3u 100BASE-TX Fast Ethernet
- 802.1X Network Access Control and Mutual Authentication
- 802.11a, 802.11b, 802.11g Wireless Ethernet
- 802.11e quality of service (QoS)(WMM), call admission control (TSPEC), unscheduled power save delivery (U-APSD)
- 802.11i 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

REGULATORY COMPLIANCE

Safety and Electromagnetic Compliance

- UL listed (UL 60950-1)
- UL listed (Canadian Electrical Code CSA 22.2 No. 60950-1)
- EN60950, IEC60950-1 (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

Dynamic Frequency Selection

- EN 301 893 v1.3.1

ORDERING INFORMATION

MP-620A	<ul style="list-style-type: none"> Outdoor MP with dual-radio 802.11a and 802.11b/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 802.11a (5 GHz) and 802.11b/g (2.4 GHz) external antennas. (Sold separately)
XPS-6201-OUT	<ul style="list-style-type: none"> Environmentally hardened outdoor power supply for MP-620 and MP620A. Designed and tested for temperature & humidity extremes as well as salt/fog environment. 100-240 VAC 50-60Hz input. Ships with cable kit and mounting bracket (excluding outdoor Cat 5 cable). Includes AC input cable with stripped ends for direct wiring or connection to a three-prong plug.
XPS-6202-OUT	<ul style="list-style-type: none"> Environmentally hardened outdoor power supply for MP-620 and MP620A. Designed and tested for temperature & humidity extremes as well as salt/fog environment. 100-240 VAC 50-60Hz input. Ships with cable kit and mounting bracket (excluding outdoor Cat 5 cable). Includes conduit coupling (Heyco 1/2" ID conduit fitting HFC-Z 1/2) for direct connection to 1/2" inside diameter steel conduit.

OPTIONAL ACCESSORIES

ANT-1120-OUT	<ul style="list-style-type: none"> 120° outdoor 802.11b/g sector antenna for MP-620 and MP-620A, 10dB gain – 2400-2500 MHz, includes 3 m M/M N-Type cable, mounting hardware
ANT-1360-OUT	<ul style="list-style-type: none"> 360° outdoor 802.11b/g sector antenna for MP-620 and MP-620A, 8dB gain – 2400-2500 MHz, N-Type connector, mounting hardware
ANT-5120-OUT	<ul style="list-style-type: none"> 120° outdoor 802.11a sector antenna for MP-620 and MP-620A, 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 802.11a sector antenna for MP-620 and MP-620A, 8dB gain – 5470-5875 MHz, N-Type Connector, mounting hardware
ANT-5PNL-OUT	<ul style="list-style-type: none"> 18° outdoor 802.11a panel antenna for MP-620 and MP-620A, 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 and MP-620A 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

Americas

5753 W. Las Positas Blvd.
Pleasanton, CA 94588
Phone 925.474.2200
Fax 925.251.0642

EMEA

Olympia 3D-2
1213 NS Hilversum
The Netherlands
Phone +31 (0) 35.64.64.420
Fax +31 (0) 35.64.64.429

Asia-Pacific

5 Shenton Way
#37-02/38-02 UIC Building
Singapore 0608808
Phone +65.6372.2351
Fax +65.6372.2352

Japan

Ark Mori Bldg., West Wing 12F
12-32, Akasaka 1-chome
Minato-ku, Tokyo 107-6024
Phone +81 (0) 3.4360.8400
Fax +81 (0) 3.4360.8447

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