

Emerge® MPX1550AP

HD Access Point

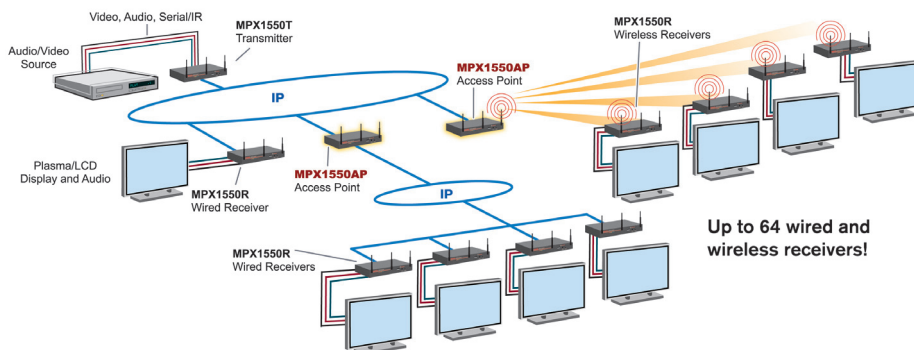


HD Access Point for Large Venue Applications

The Avocent EmERGE MPX1550AP HD access point allows AV professionals to deliver IP-based audio video extension solutions for large-scale venues involving multiple floors, departments, and/or buildings such as universities, theme parks, hospitals, and airports. Combined with Avocent IP-wired/wireless MPX1550 HD transmitters and receivers, the solution extends audio, video, serial, and IR signals from a source to widely-distributed display devices. Video support includes HDMI™, DVI-D, VGA, and YPbPr. Audio support includes HDMI audio and unbalanced analog audio. Serial and IR pass through allows for control of source and display devices. Central management is provided through an onboard web server.

The MPX1550AP is a hybrid device that interconnects MPX receivers with an MPX transmitter. This connectivity occurs across normal IP networks. MPX access points leverage copper, fiber, and wireless IP networks that span multiple floors or buildings to bind with an MPX transmitter. MPX receivers at these diverse locations are then able to bind with the MPX access point in a wired or wireless manner. Acting as a remote agent for the MPX transmitter, the access point forwards video, audio, serial, and IR data from the transmitter to its bound receivers. Retransmissions are handled locally by MPX access points, thus minimizing the burden on the MPX transmitter and wired network.

MPX extenders (transmitters, receivers, and access points) are pre-configured with IP addresses that allow for proper communication among a single transmitter and its associated MPX access points and receivers across a private switched LAN or VLAN network. Custom IP address configuration settings are provided, however, to allow an MPX transmitter to share a LAN with other MPX transmitters or third-party devices.



Emerge MPX1550AP HD access point is ideally-suited for use in large venue applications that require one-to-many distribution and centralization of source devices. Large venue applications include: universities, theme parks, airports, railways, casinos, shopping malls, hospitality, corporate signage, and cinemas.

FEATURES AND BENEFITS

- **Access Point Functionality.** Allows the creation of large-scale video extension solutions that span multiple floors, departments, and/or buildings. AV extension networks allow for centralization of source devices for ease of installation, monitoring, upgrade, and maintenance.
- **Combined Wired and Wireless.** Solutions consisting of wired and wireless connectivity provide reliability of wiring where it is applicable, as well as the cost efficiencies of wireless installation. Users are able to reap the benefits of both types of connectivity in the same installation.
- **Multipoint Distribution.** Allows a single MPX transmitter to provide signals to 64 displays.
- **IP Configuration.** Configurable IP addresses allow MPX extenders to leverage existing IP networks. This can save considerable expense in multi-site venues.
- **AES 128 Bit Encryption.** Audio-visual information is encrypted with built-in Advanced Encryption Standard (AES) for secure transmission.
- **IR Control.** Supports broadcast and bi-directional IR data transfers for session control from the point of display or for display control from the location of the source device. Mini-jack cables allow IR blasters and receivers to be optimally placed.
- **Web Control Interface.** Allows local or remote control and configuration of the system without special software tools.
- **Serial Interface.** Allows integration with third party control systems.

EMERGE® MPX1550AP HD ACCESS POINT

Technical Specifications

Mechanical / Power / Environmental

Size: 4.55" (116 mm) D, 6.92" (176 mm) W, 1.00" (25.4 mm) H
Weight: 1.4 lbs (0.64 Kg)
Power (AC input/frequency): 100 - 240 VAC / 50 - 60Hz
Inrush Current: 14.2 Amps (AC/DC adapter)
Operating Temperature: 32°F (0°C) to 118.4°F (48°C)
Storage Temperature: -4°F (-20°C) to 140°F (60°C)
Humidity: 20% to 80% (Non-condensing)
Altitude: Altitude 10,000 ft across the operating temperature range, 35,000 ft across storage temperature range
Shock: 140G - 3 axis

Connections (Front)

RP-SMA Connector (2): Antenna connectors
USB: USB 1.1 (not used at this time)

Connections (Rear)

DC Power: DC barrel connector: 12VDC @ 1.5Amps
Serial (RJ-45): RJ45 serial port for control of attached display devices. Requires optional DB9-UNI female serial cable. Baud rates up to 38.4K
L1 LAN (RJ-45): IEEE 802.3 10/100 Ethernet, used for web access and inbound media
L2 LAN (RJ-45): IEEE 802.3 10/100 Ethernet, used for outbound media

Video Details

Video Gain: Unity ±1DB
Digital Video Standards: HDCP compliant, HDMI 1.2 compliant, DVI-D DDC2B
Maximum Wired Video Bit Rate: 80 Mbps
Maximum Wireless Video Bit Rate (Topology Mode):
1-to-1 mode (110 Mbps); 1-to-Many mode (50 Mbps)

Video Resolutions (RGB):

Computer (RGB) at 30fps	SD video (RGB) at 30 fps
● 640 x 480 @ 60Hz	● 480p @ 60Hz
● 800 x 600 @ 60Hz	● 576p @ 50Hz
● 1024 x 768 @ 60Hz	
● 1280 x 720 @ 60Hz	HD video (RGB) at 30 fps
● 1280 x 768 @ 60Hz	● 720p @ 50/60Hz
● 1360 x 768 @ 60Hz	

Video Resolutions (component video):

SD video (component) at 30 fps	HD video (component) at 30 fps
● 480i @ 60Hz	● 720p @ 50/60Hz
● 480p @ 60Hz	● 1080i @ 50/60Hz
● 576i @ 50Hz	
● 576p @ 50Hz	

Video Resolutions (HDMI and DVI-D):

Computer resolution at 30 fps	SD video at 30 fps
● 640 x 480 @ 60Hz	● 480i @ 60Hz
● 800 x 600 @ 60Hz	● 480p @ 60Hz
● 1024 x 768 @ 60Hz	● 576i @ 50Hz
● 1280 x 720 @ 60Hz	● 576p @ 50Hz
● 1280 x 768 @ 60Hz	
● 1360 x 768 @ 60Hz	HD video at 30 fps
	● 720p @ 50/60Hz
	● 1080i @ 50/60Hz

Audio Details

Line Audio Outputs: Line audio inputs less than or equal to 10K Ohm with 0-36dB of headroom
Frequency Response: Analog audio frequency response: 20Hz-20KHz with a 3dB per octave roll-off beginning at 14 kHz

Radio Bands

UNII 1: (4 channels) 5.15-5.25 GHz: These are available as 2 bonded channels
UNII 3: (4 channels) 5.725 to 5.825 GHz: These are available as 2 bonded channels

Extension Distances

Wired Distance: Wired distance limitations conform to Ethernet standards for a single subnet (no routing)
Wireless Distance: Up to 300 ft (90 m) line of sight and 150 ft (45 m) through interior (gypsum) walls

Regulatory Compliance (CMN: 2003 Series)

Standards: FCC Class B, UL, cUL, RoHS, CE, ICES-003, WEEE

Warranty

MPX1550AP: Two years



Ordering Details

MPX1550AP HD Access Point

Part Number	Description
MPX1550AP	HD Access Point
MPX1550T	Transmitter (Supports up to 8 receivers)
MPX1550R	Receiver

Optional Accessories

Antenna Extension Kits

Part Number	Description
5G-1M/3	Antenna Extension Kit, 1 Meter Cable
5G-2M/3	Antenna Extension Kit, 2 Meter Cable
5G-3M/3	Antenna Extension Kit, 3 Meter Cable

Mounting Options

Part Number	Description
RMK-56	Table/Desk Mount Bracket
PBK-01	Optional Power Supply Bracket for MPX1550R, AP
DMK-04	Wall Mount Kit for MPX1550R
DMK-07	Desk Mount Kit for MPX1550T, AP

Adapters

Part Number	Description
DVI-HDMI/CEC	Adapter for HDMI with CEC for MPX1550R
DVI-HD15F	DVI-H Male to HD15 Female Adapter with MPX1550 ID Bits
DVI-BNC3	Adapter for Component Video for MPX1550 T/R

Cables

Part Number	Description
DB9-UNI	Serial RJ-45 to DB-9 Female Kit Cable, 1 FT
DB9-DUAL	Dual DB-9 Female Cable for MPX T/R, 1 FT
HDMI-1M	Male to Male 1 Meter Cable for MPX T/R

IR Blasters

Part Number	Description
IRB-100	Dual IR Blaster With 3.5mm Mini-Jack Cable
IRB-Y	3.5mm Mini-Jack Splitter for Two IRB-100 Blasters

IR Receivers

Part Number	Description
IR-RX	IR Receiver - 2.5mm with Connector



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