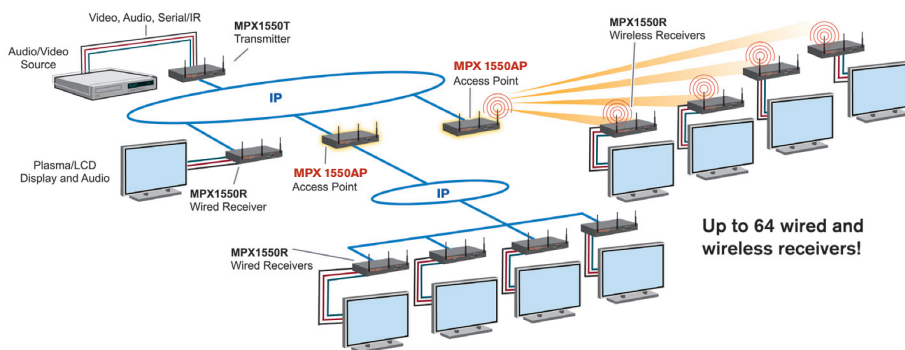


## High-Definition (HD) Access Point (AP) for Large Venue Applications

The Avocent Emerge MPX1550 AP 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. The MPX 1550AP access point works with MPX 1550T transmitters and MPX 1550R receivers to comprise the Emerge multipoint HD wired/wireless extender system (MPX extender system). The MPX extender system 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 on-board Web server.

The MPX 1550AP access point 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.

The MPX transmitters, receivers and access points are pre-configured with IP addresses that allow for proper communication among a single transmitter and its associated 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 MPX 1550AP 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, corporate signage and cinemas.*



**MPX1550AP Access Point**

## 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, upgrades, 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 extender systems 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 bidirectional 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.

## Ordering Details

| Part Number                   | Description  |
|-------------------------------|--|
| MPX1550AP-XXX                 | HD Access Point  |
| MPX1550T-XXX                  | Transmitter (Supports up to 8 receivers)               |
| MPX1550R-XXX                  | Receiver   |
| <b>Antenna Extension Kits</b> |  |
| 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                   |
| <b>Mounting Options</b>       |  |
| 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                        |
| <b>Adapters</b>               |  |
| DVI-HDMI/CEC                  | Adapter for HDMI with CEC for MPX1550R                 |
| DVI-HD15F                     | DVI-I Male to HD15 Female Adapter with MPX1550 ID Bits |
| DVI-BNC3                      | Adapter for Component Video for MPX1550 T/R            |
| <b>Cables</b>                 |  |
| 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                 |
| <b>IR Blasters</b>            |  |
| IRB-100                       | Dual IR Blaster With 3.5mm Mini-Jack Cable             |
| IRB-Y                         | 3.5mm Mini-Jack Splitter for Two IRB-100 Blasters      |
| <b>IR Blasters</b>            |  |
| IR-RX                         | IR Receiver - 2.5mm with Connector                     |

## Specifications

### Mechanical

**Size:** 4.55 in. (116 mm) D, 6.92 in. (176 mm)W,  
1.00 in. (25.4 mm)H

**Weight:** 1.4 lbs. (0.64 kg)

### Environmental

**Operating Temperature:** 32° to 118.4°F (0° to 48°C)

**Storage Temperature:** -4° to 140°F (-20° to 60°C)

**Humidity:** 20% to 80% (Non-condensing)

### Power

**Power Frequency:** 100 - 240 VAC / 50 - 60Hz

**Inrush Current:** 14.2 Amps (AC/DC adapter)

**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):** RJ-45 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  $\pm$ 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 30 fps | SD video (RGB) at 30 fps |
| • 640x480 @ 60Hz         | • 480p @ 60Hz            |
| • 800x600 @ 60Hz         | • 576p @ 50Hz            |
| • 1024x768 @ 60Hz        | HD video (RGB) at 30 fps |
| • 1280x720 @ 60Hz        | • 720p @ 50/60Hz         |
| • 1280x768 @ 60Hz        |                          |
| • 1360x768 @ 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 |
| • 640x480 @ 60Hz              | • 480i @ 60Hz      |
| • 800x600 @ 60Hz              | • 480p @ 60Hz      |
| • 1024x768 @ 60Hz             | • 576i @ 50Hz      |
| • 1280x720 @ 60Hz             | • 576p @ 50Hz      |
| • 1280x768 @ 60Hz             | SD video at 30 fps |
| • 1360x768 @ 60Hz             | • 720p @ 50/60Hz   |
|                               | • 1080i @ 50/60Hz  |

## Audio Details

**Line Audio Outputs:** Line audio inputs less than or equal to 10KOhm 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 Details

**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 Access Point:** Two years

For country-specific availability, please contact an Avocent representative.



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