

AirMedia® Presentation System 300



- Complete room solution enables secure wired and wireless presentation with AirMedia® 2.0 wireless presentation from laptops, smartphones, and tablet devices, while delivering enterprise-grade security and content encryption to protect privacy and ensure compliance with IT policies
- Use with optional Crestron AirBoard® Whiteboard Capture Device or Kaptivo® Whiteboard Device to display and share whiteboard content
- Integration with Appspace® digital signage software platform for content display when system is not in use
- HDMI® and DM® inputs provide wired connectivity for sources
- Customizable welcome screen provides clear instructions for presenters, displaying space availability, meeting details, and other messages onscreen
- Natively integrates with Microsoft 365®, Outlook®, Google Calendar™, and other calendaring applications as well as Crestron Fusion® room scheduling and enterprise management services
- XiO Cloud® service support enables remote provisioning and management

The AirMedia® Presentation System 300 ([AM-300](#)) enables secure wired and wireless presentation in lounges, lobbies, and open spaces, and integrates with popular calendaring platforms to maximize use. It is ideal for organizations with a dispersed workforce, open floor plans, and reliance on mobile devices to present.

Connect and Present

The AM-300 mounts invisibly behind a wall-mount display and enables wired or wireless presentation with autoswitching. It features AirMedia 2.0 wireless presentation capability, an HDMI® input, a DM input, HDMI output to the display (HD or WUXGA), and auto-on/off display control via CEC, serial, or IR. Connecting a source selects that input automatically and instantly displays the source image on the display. There's no programming required, no dongles to plug in, and no remotes to lose or batteries to replace.

AirMedia Wireless Presentation

Crestron AirMedia technology allows for wireless presentation of content from laptops, smartphones, and tablet devices via a Wi-Fi® wireless network or an optional wireless access point.¹ AirMedia enables presentation of Full HD video at frame rates up to 30 fps. Desktop and laptop computer users can present content using downloadable client software, the AirMedia extension for Google Chrome™ browser, or Miracast™¹ screen mirroring technology (Windows 10 computers only). Android and iOS mobile devices can present with the AirMedia app or the Crestron PinPoint™ app. For more information about AirMedia, visit www.crestron.com/airmedia.²

HDMI and DM Connectivity

In addition to AirMedia, the AM-300 includes an HDMI input for direct connection of a mini-PC or other local source, or a portable laptop computer via an optional wall plate or cable. A DM® input (DM 8G+®) is also provided, allowing a DM 8G+ transmitter to be installed in the space to facilitate a wired connection of a laptop or other source. The DM input may also be used to connect to a DM switcher, which may be located up to 330 ft (100 m) away, to support the display of content from another room or other remote location. The HDMI input supports HD 1080p signals while the DM input supports 4K signals.^{3, 4, 5}

AirMedia Canvas

The AM-300 can be configured to simultaneously present two sources to the display using the AirMedia Canvas feature. AirMedia Canvas automatically configures the best possible layout to maximize screen coverage based on the number of active sources, the type of sources, and their aspect ratios.⁶ A connected touch screen can also be used to manage sources and their position on the display.

Native Appspace Functionality

The AM-300 integrates with the Appspace content management application for digital signage which allows the AM-300 to show Appspace content on a connected display when a space is not in use.

Whiteboard Capture Device Compatibility

The AM-300 works with the Crestron AirBoard ([CCS-WB-1](#)) and Kaptivo Whiteboard Capture Devices. Simply pair the whiteboard capture device with the AM-300, and all of the device controls are available on a connected touch screen.⁷ Manage remote participants, start and stop a whiteboard session, route the whiteboard content to the associated display, and email a snapshot or timeline of the whiteboard session.⁸

Enhanced Onscreen Experience

When no presentation source is connected, the AM-300 displays a customizable welcome screen on the room display with simple instructions for connecting and presenting. Integration with Microsoft Exchange Server® (for users of Outlook® and Microsoft 365® software), Google Calendar™, or [Crestron Fusion®](#) room scheduling allows the space's

AirMedia® Presentation System 300

availability and details about the current scheduled meeting to appear onscreen. As the meeting progresses, notifications appear periodically to indicate the time left in the meeting and the next scheduled event. Pop-up messages, sent from Crestron Fusion, may also appear in the event of an emergency or other important announcement.

XiO Cloud Provisioning and Management Service

The AM-300 is compatible with the XiO Cloud service, which enables installers and IT managers to easily deploy and manage thousands of devices. The XiO Cloud service allows for system alerts and network management and provisioning. For more information, visit www.crestron.com/xiocloud.

Crestron Fusion Room Monitoring

AM-300 presentation spaces can be managed and centrally monitored through the Crestron Fusion enterprise management service. By adding an optional wireless occupancy sensor ([ZUMMESH-PIR-OCCUPANCY-BATT](#)), the AM-300 can report and log when people are present in the space, turn the display on and off accordingly, and make unused spaces available for new bookings. Crestron Fusion software supports room scheduling, and can integrate with a variety of third-party calendaring applications. In the event of a technical issue, instant alerts notify the help desk to rapidly resolve problems and maximize uptime and workflow. For more information about Crestron Fusion, visit www.crestron.com/fusion.

Enterprise-Grade Security

The AirMedia Presentation System is an enterprise-grade solution that can be deployed across hundreds of spaces, and set up easily using just a web browser, Crestron Fusion, or XiO Cloud service. It employs standard network security protocols, including 802.1x network access control, Active Directory® authentication, and AES content encryption, to protect privacy and ensure compliance with your organization's IT policies.

Add-on Control Options

Manual control of the AM-300 can be enabled by adding a Crestron TS- or TSW- series 7 in. or 10 in. touch screen. The touch screen provides an additional view of the room schedule and meeting details, with controls for input source selection, display power on/off, and display volume and mute, plus a help page. Additional control options include a wireless 4-button keypad ([ZUMMESH-KP10AMBATT](#) series⁹), which provides simple on/off and volume control, a Power over Ethernet occupancy sensor ([CEN-ODT-C-POE](#)), and a wireless occupancy sensor ([ZUMMESH-PIR-OCCUPANCY-BATT](#)) for enhanced automation and room monitoring functionality. The wireless keypad and wireless occupancy sensor require the addition of the AV Bridge accessory ([ZUMMESH-AVBRIDGE](#) or [ZUMMESH-AVBRIDGE-I](#)), which connects to the AM-300 via USB.

Specifications

Communications

Ethernet	100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), IEEE 802.1x, Active Directory authentication, HTTPS web browser setup and XiO Cloud service
AirMedia	Via Ethernet: IPv4, mDNS, TLS, AES ² ; Via wireless access point: IEEE 802.11/b/g/n/ac, 2.4 GHz or 5 GHz

NOTE: The wireless access point requires the [AM-USB-WIFI](#) or [AM-USB-WF-I](#) AirMedia USB Adapter with Wi-Fi Connectivity (sold separately).¹

USB Host	USB 2.0 for optional AV Bridge (ZUMMESH-AVBRIDGE or ZUMMESH-AVBRIDGE-I (sold separately)) for use with wireless keypad control and occupancy sensing ⁹ or the AirMedia USB Adapter with Wi-Fi Connectivity (AM-USB-WIFI or AM-USB-WF-I (sold separately)) for use with Miracast screen mirroring technology
USB Device	USB 2.0 for computer console (installer setup and firmware update)
RS-232	2-way display device control up to 115.2k baud with hardware and software handshaking
IR/Serial	1-way display device control via infrared up to 1.1 MHz or serial TTL/RS-232 (0-5V) up to 19.2k baud
DigitalMedia™	DM 8G+, HDCP 1.4 or 2.2 EDID, Ethernet, PoDM sourcing ⁴
HDMI Input	HDCP 1.4, EDID; Supports management of HDCP and EDID
HDMI Output	HDCP 1.4 or 2.2, EDID, CEC; Supports management of HDCP and EDID

AirMedia²

OS Support	Apple® iOS®, Android™, Windows® 7, Windows 8, Windows 10, macOS®, Chrome OS™
Video Frame Rate	Up to 30 fps, audio supported

NOTE: Audio is not supported on Android devices

AirMedia® Presentation System 300

Output Resolutions 640x480@60Hz, 800x600@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x800@60Hz, 1366x768@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60)

NOTE: All video inputs will be scaled to the selected HDMI output resolution.

Bitrate Peak 0.25 to 8.5 Mbps, variable depending on content complexity

Bitrate Average 1.4 Mbps typical

NOTES:

- The bitrate for Apple native mirroring may deviate from above depending on the OS version and content
- The AirMedia Extension for the Google® Chrome browser relies on web technologies for screen sharing that are built-in to the web browser. Performance variations with motion video (quality and frame rate) may occur based upon the encoding capabilities of the Chrome OS device and the nature of the content being displayed (i.e., high-motion video).

Audio Format Stereo

Video

Input Signal Types AirMedia, DM 8G+, HDMI (DVI & Dual-Mode DisplayPort™ compatible³); Simultaneous display of two sources with AirMedia Canvas⁶

Output Signal Types HDMI (DVI compatible³)

Maximum Input Resolutions

Input Type	Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
DM 8G+	Progressive	4096x2160 DCI 4K or 3840x2160 4K UHD	24 Hz	4:4:4	30 bit
			30 Hz	4:4:4	24 bit
			30 Hz	4:2:2	36 bit
			60 Hz	4:2:0	24 bit
		2560x1600 WQXGA	60 Hz	4:4:4	36 bit
		1920x1080 HD1080p	60 Hz	4:4:4	36 bit
DM 8G+	Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit
			60 Hz	4:4:4	36 bit
HDMI	Progressive	1920x1080 HD1080p	60 Hz	4:4:4	36 bit

NOTE: Common input resolutions are shown; other custom input resolutions are supported at pixel clock rates up to 300 MHz for the DM 8G+ input, or 148 MHz for the HDMI input; interlaced video is not supported via the HDMI input.

Output Resolutions 1920x1080@60Hz (1080p60), 3840x2160@30Hz (4K UHD)

NOTE: All video inputs will be scaled to the selected HDMI output resolution.

Background & Logo File Support GIF, JPEG, PNG

Audio

Input Signal Types AirMedia, DM 8G+, HDMI (Dual-Mode DisplayPort compatible³)

Output Signal Type HDMI

DM Input Formats Up to 8 channel LPCM

HDMI Input Formats 2 channel LPCM

HDMI Output Formats Up to 8 channel LPCM

NOTE: Audio input signals are passed to the output without any processing. Volume control capability requires a display device with discrete volume, up, down, and mute commands available via CEC, IP, IR, or RS-232.

AirMedia® Presentation System 300

Connectors

Console	(1) Micro-USB Type B connector, female; USB 2.0 device port for computer console (installer setup)
IR	(1) 4-pin 3.5 mm detachable terminal block; IR/Serial output port for display device control; IR output up to 1.1 MHz; 1-way serial TTL/RS-232 (0-5V) up to 19200 baud
	NOTE: IR port #2 is not used. IRP2 emitter sold separately.
COM	(1) 5-pin 3.5 mm detachable terminal block; Bidirectional RS-232 port for display device control; Up to 115.2k baud, hardware and software handshaking support
HDMI INPUT	(1) HDMI Type A connector, female; HDMI digital video/audio input; (DVI & Dual-Mode DisplayPort compatible ³)
HDMI OUTPUT	(1) HDMI Type A connector, female; HDMI digital video/audio output; (DVI compatible ³)
USB	(1) USB Type A connector, female; USB 2.0 host port for AV Bridge (ZUMMESH-AVBRIDGE or ZUMMESH-AVBRIDGE-I (sold separately)) or AirMedia USB Adapter with Wi-Fi Connectivity (AM-USB-WIFI or AM-USB-WF-I (sold separately))
LAN	(1) 8-pin RJ-45 connector, female; 100Base-TX Ethernet port
DM IN	(1) 8-pin RJ-45 connector, female, shielded; DM 8G+ input and PoDM PSE port ^{4,5}
24VDC 2.5A	(1) 2.1 x 5.5 mm DC power connector; 24VDC power input; PW-2420RU power pack included
Ground	(1) 6-32 screw; Chassis ground lug

Controls & Indicators

PWR	(1) Green LED, indicates operating power supplied via the local power pack or PoE, flashes while booting
RESET	(1) Recessed push button for hardware reset
SETUP	(1) Red LED and (1) recessed push button, not used
ONLINE	(1) Green LED (not used)
HDMI IN & OUT	(2) Green LEDs, indicate HDMI signal presence at the HDMI input or output

LAN PoE	(2) LEDs, green LED indicates Ethernet link status, amber LED indicates Ethernet activity
DM IN	(2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence

Power

Power Pack (included)	Input: 100-240VAC, 50/60 Hz; Output: 2.5A @ 24VDC; Model: PW-2420RU
Power Consumption	24 W (typical without a PoDM PD connected)

Environmental

Temperature	32° to 104°F (-0° to 40°C)
Humidity	10% to 95% RH (non-condensing)
Heat Dissipation	81.9 BTU/hr

Enclosure

Chassis	Metal, black finish, with (2) integral mounting flanges, vented sides
Mounting	Freestanding, surface mount, or attach to a single rack rail

Dimensions

Height	7.93 in. (201 mm)
Width	9.28 in. (236 mm)
Depth	1.36 in. (35 mm)

Weight

1 lb 9.6 oz (726 g)

Compliance

Regulatory Model: AM-300
 UL® Listed for US & Canada, CE, IC, FCC Part 15 Class B digital device

AirMedia® Presentation System 300

DM 8G+ Maximum Cable Lengths

Cable Type	DM-CBL-ULTRA DM® Ultra Cable	DM-CBL-8G DM 8G® Cable	CAT5e (or better) ⁵
1080p60 Full HD	330 ft (100 m)	330 ft (100 m)	330 ft (100 m)
1920x1200 WUXGA			
1600x1200 UXGA			
2048x1080 DCI 2K			
2560x1440 WQHD			
2560x1600 WQXGA	230 ft (70 m)	165 ft (50 m)	
3840x2160 4K UHD			
4096x2160 DCI 4K			

- The DM input receives video and audio signals and passes EDID and HDCP data. CEC and other control data are not supported via the DM input at this time. A transmitter with multiple inputs must be set for auto-switching mode. Any control ports on the transmitter are not utilized. Ethernet is also passed between the external LAN ports on the AM-300 and the connected DM 8G+ transmitter. The AM-300 can obtain its LAN connection over DM from a networked DM 8G+ transmitter or DM switcher, but does not receive an IP address on the switcher's private network. The AM-300 requires its own IP address whether connected to the LAN via its onboard LAN port or through a switcher or transmitter.
- The maximum cable length for DigitalMedia 8G+® (DM 8G+) is dependent upon the type of cable, resolution of the video signal, and capabilities of the connected device. Refer to the "DM 8G+ Maximum Cable Lengths" table for a detailed overview. Shielded cable and connectors are required when bundling multiple cables in a wire run, and are recommended for all applications to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. Refer to the [Crestron DigitalMedia System Design Guide](#) (Doc. 4546), for DM system design guidelines. All wire, cables, transmitters, and other devices are sold separately.
- When the AirMedia Canvas feature is enabled, the 4:2:0 color space is used for high definition sources connected to the HDMI input port. When the AirMedia Canvas feature is disabled, the 4:4:4 color space is used. If the 4:4:4 color space is required by sources connected to the HDMI input port, the AirMedia Canvas feature should be disabled.
- A TS- or TSW- series 7 in. or 10 in. touch screen (sold separately) is required for operation.
- Crestron AirBoard or Kaptivo integration with the AM-200/300 is entirely configuration-based. When the whiteboard capture device is paired with the AM-200/300, programmatic control is not supported in SIMPL Windows or SIMPL# Pro. If custom program controls for a whiteboard capture device are required, use a [DGE-100](#) in place of an AM-200/300.
- Wireless keypad functionality is limited to power and volume control, and requires use of a display device that supports discrete power on, power off, volume up, and volume down commands via CEC, IP, IR, or RS-232.

Model

AM-300

AirMedia® Presentation System 300

Included Accessory

PW-2420RU

Desktop Power Pack, 24VDC, 2.5A, 2.1 mm, Universal

Available Accessories

For a list of available accessories, visit the [AM-300](#) product page.

Notes:

- Requires the [AM-USB-WIFI](#) or [AM-USB-WF-I](#) (sold separately). Use of the AM-USB-WIFI or AM-USB-WF-I prevents use of the [ZUMMESH-AVBRIDGE](#), [ZUMMESH-AVBRIDGE-I](#), [ZUMMESH-KP10AMBATT](#), and [ZUMMESH-PIR-OCCUPANCY-BATT](#).
- AirMedia wireless presentation requires a wired network connection between the AM-200 and an external Wi-Fi wireless access point (not included). Laptops may alternately connect to AirMedia using a wired Ethernet connection. Full-motion video performance is dependent upon the performance of the network and the sending device. Computer client software and mobile device apps are available for download at <https://www.crestron.com/airmedia>.
- Using an appropriate adapter or interface cable, the HDMI input can support DVI and Dual-Mode DisplayPort sources, and the HDMI output can provide a DVI signal. CBL-HD-DVI interface cables are available separately.

AirMedia® Presentation System 300

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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AirMedia® Presentation System 300

