MediaPort 300

4K HDMI AND AUDIO TO USB SCALING BRIDGE

4K UHD 5Gbps USB EVERLAST POWER SUPPLIES

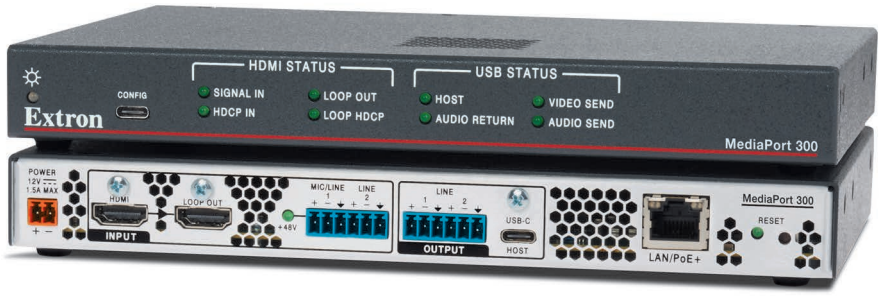
Pro AV Integration for Software Conferencing Applications

- Integrates pro AV sources into software codec applications
- COMING SOON AES67 audio support
- HDMI input supports computer and video resolutions up to 4K/60
- Video scaling provides USB output up to 4K/30 to match common software codecs
- Device connections up to USB 5 Gbps using generic USB drivers
- Integrated audio mixing, level, and mute control
- Mic/line input with 48 volt phantom power

Extron

MediaPort 300

The Extron MediaPort 300 is a 4K HDMI to USB bridge for integrating pro AV systems with software codec conferencing applications. It works seamlessly with a computer using generic USB video and audio drivers. The MediaPort 300 features an HDMI input with HDCP-compliant loop through, accepts signals up to 4K/60, and scales video up to USB 5 Gbps output rates. Audio features include program and mic inputs, HDMI audio de-embedding, USB bidirectional audio, line-level outputs, and AES67 support. The MediaPort 300 also features audio mixing in adddition to level and mute controls. This enables it to serve as a soft codec interface, giving it the flexibility to integrate into larger hardware codec or DSP systems.



The MediaPort 300 connects to Windows® or Mac®-based computers. It can be used with popular software and cloud-based communications platforms including Microsoft Teams®, Adobe® Connect™, Google Meet®, Skype®, FaceTime®, GoToMeeting®, Cisco WebEx®, Zoom™, and more.

Works with these and other conferencing systems:

Compatible with these meeting room solutions:

Enhance Conferencing For Any Room

The MediaPort 300 bridges the gap between simple webcam-to-computer solutions and traditional AV conferencing systems. For small meeting spaces with just a computer and display, the MediaPort 300 is ideal for enhancing audio and video quality by adding support for professional-grade equipment such as videoconferencing PTZ cameras, boundary microphones, and sound reinforcement systems. The MediaPort 300 facilitates easy integration of conferencing computers into pro AV designs.

FEATURES

Integrates Pro AV systems and sources into soft codec applications
Sends audio and video signals from a presentation source or switcher to a computer, for integration with software and cloud-based communication platforms.

HDMI input supports computer and video resolutions up to 4K/60
Supports resolutions up to 4096x2160 with 4:4:4 chroma sampling at 8 bits of color.

USB 5 Gbps compatible
Supports newer USB 3 rates and is backwards compatible with prior USB versions.

USB device connections up to USB 5 Gbps using generic drivers for universal compatibility
The MediaPort 300 incorporates industry standard UVC - USB Video Class and UAC - USB Audio Class drivers, providing universal compatibility with Windows®, Mac OS®, Linux, and other operating systems.

Video scaling provides USB output up to 4K/30 to match common software codec requirements
Extron-engineered image processing preserves detail and legibility of source content to ensure optimal quality of camera or computer video content for far-end conferencing participants.

Scaling optimized to UC software codec requirements via custom resolution groups
User-customizable resolutions can be defined in groups such as high and low quality to force the software codec to use the best scaled USB streaming resolution for current network and codec processor conditions.

Flexible USB Enumeration Options
The MediaPort 300 can be configured to be recognized on the USB host computer as a Webcam plus Speakerphone (default), Speakerphone Only, Webcam Only, or Disabled. This gives the presenter flexibility in how they use the MediaPort 300 in their particular setting.

HDMI loop-through
Provides an output signal for a local display or an AV system, enabling the content to be monitored or shared without the need for a separate distribution amplifier.

HDCP-compliant HDMI input

Integrated audio mixing, level, and mute control
Provides basic audio mixing and processing for USB audio to deliver high quality audio for conference participants.

USB Audio Control Synchronization
Bidirectional audio controls allow speaker and microphone level, mute, and status information to remain in sync whether controlled from the UC computer or an AV room control system managing the MediaPort 300.

48V phantom power Mic/Line input
A mic or line level audio source can be mixed with program audio. Selectable 48 volt phantom power allows the use of condenser microphones.

USB 2x2 audio interface
The USB connection provides a 2x2 channel audio interface with a computer, similar to a standard USB sound card with send and return audio capability. This allows the MediaPort 300 to send a two-channel audio source mix to a personal computer, and the computer to deliver program audio plus two-channel communication audio from the soft codec's far-end to the MediaPort 300.

UC Telephony Controls from AV Control System
Bidirectional USB call controls through the MediaPort 300 allow the AV control system to manage common call functions such as answer, end, hold, etc. when using Teams, Zoom, or other UC systems with the MediaPort 300.

Auto-Image™ setup
When activated, the unit automatically optimizes the image by analyzing and adjusting to the video input signal. This can save time and effort in setting up a newly connected source, particularly in presentation environments where different guest presenter laptops with various output resolutions will be connected.

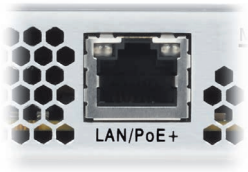
Front panel LED indicators for HDMI and USB signal status
Provide visual feedback for HDMI input and loop-through signal presence, HDCP status, plus USB signal presence for the host computer, video send, audio send, and audio return.

Logo image display
The MediaPort 300 can be set to automatically display a user-supplied image file on the HDMI output whenever no signal is present or on the USB output if HDCP-protected content is being used and no video can be displayed.

Aspect ratio control
The aspect ratio of the video output can be controlled by selecting a FILL mode, which provides a full screen output, or a FOLLOW mode, which preserves the original aspect ratio of the input signal.

Auto Input Memory
When activated, the unit automatically stores size, position, and picture settings based on the incoming signal. When the same signal is detected again, these image settings are automatically recalled from memory.

Ethernet monitoring and control
Enables control and proactive monitoring over a LAN, WAN, or the Internet.



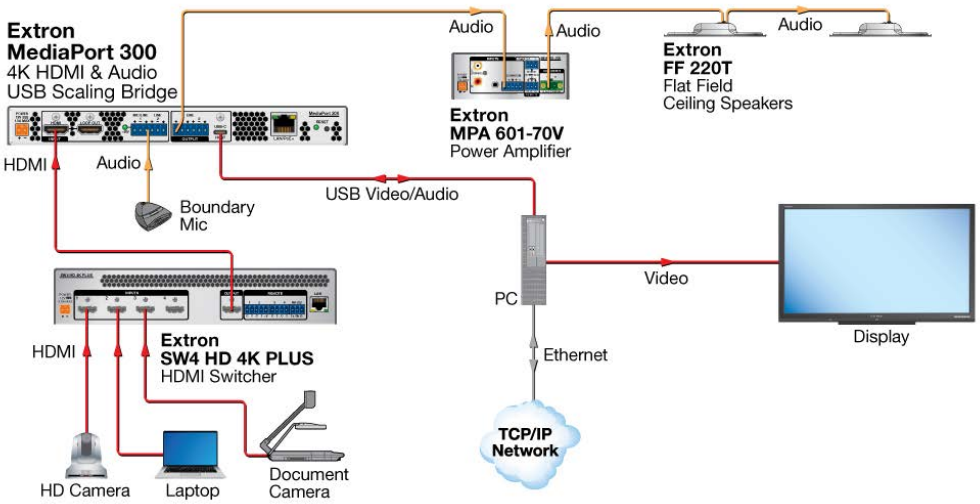
PoE+ delivers power and communication over a single Ethernet cable, eliminating the need for a local power supply

AES67 audio support
Supports the AES67 audio over IP standard, providing compatibility for two inputs and outputs from Dante/AES67 microphones, amplifiers, or audio DSP processors.

External Extron Everlast® power supply with 7-year warranty
Provides worldwide power compatibility, with high-demonstrated reliability and low power consumption for reduced operating cost.

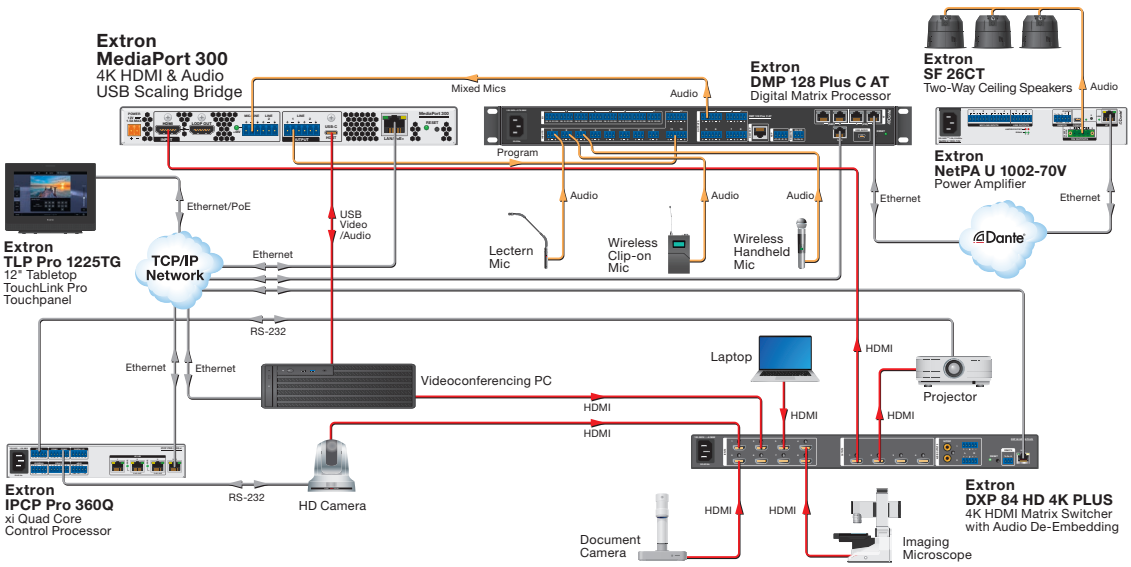
UC Meeting Room

In a small meeting room, the MediaPort 300 provides a quality AV experience for UC conferencing sessions with the incorporation of professional-grade video sources and sound reinforcement. An HD camera provides sharp, detailed video content to the MediaPort 300, which scales the image to a size appropriate for the available PC as well as network bandwidth to the far-end. A high-quality boundary microphone delivers optimal audio fidelity to the far-end participants. The DSP processes the far-end return audio before passing the signal to an Extron MPA 601-70V and FF 220T speakers.



Hybrid Learning Classroom

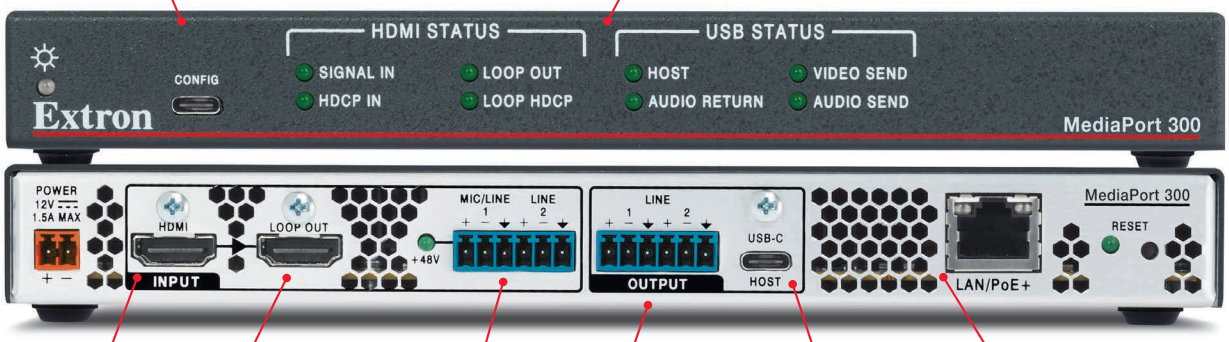
A hybrid classroom utilizes the MediaPort 300 and a matrix switcher to integrate a UC conferencing PC. Multiple room sources including a laptop, document camera, imaging microscope, and high-quality HD camera connect to an Extron DXP 84 HD 4K PLUS matrix switcher for routing signals to the MediaPort 300. The MediaPort 300 unit's USB output provides video and audio to the videoconferencing computer and receives return audio from the far-end conference session. An Extron DMP 128 Plus C AT digital matrix processor, provides an audio mix of the room microphones to the MediaPort 300, while sending program audio output to the sound system. Source selection, audio management, and device control are simplified with an Extron TouchLink® touchpanel and IPCP Pro 360Q control processor.



OVERVIEW

Compact Enclosure
1” (2.5 cm) high half-rack width metal enclosure can be rack mounted or discreetly installed in furniture.

Status LEDs
Provide video signal and HDCP presence status for input and loop out connections. USB status LEDs Indicate host presence, video send, audio send, and return status.



HDMI Loop-Through
Provides output signal for a local display or an AV system.

Analog audio output
Provides a two-channel output signal for an external DSP or sound system.

PoE+, Ethernet Control, and AES67 Audio
Ethernet control, power and audio are delivered over a single cable eliminating the need for a local power supply or room audio connections.

4K HDMI input
Accepts input signals up to 4096x2160 with 4:4:4 chroma sampling at 8 bits of color.

Mic/Line inputs
Includes one with selectable 48-volt phantom power, allowing use of professional-grade condenser microphones.

USB-C Output
Delivers video and bidirectional audio to a computer using generic USB video and audio drivers.

MediaPort Product Comparison

	MediaPort 300	MediaPort 200
Max Input Resolution (HDMI)	4K/60	1920x1200/60
Max Output Resolution (USB)	4K/30	1080p/24
AES67 Audio Support	•	
Audio DSP	Basic	Advanced
Stereo Line Level Input		•
Audio Inputs	Mic & Line or 2 Mono	Mic & Stereo
USB Audio Interface	2x2	4x2
AEC Ref & Aux Audio Outputs		•
USB Output Connection	USB-C	USB Type-B
Max USB Data Rate	USB 5Gbps	High Speed
USB Audio Control Sync	•	
UC Tele. Controls by Cntrl Sys	•	
RS-232		•
Digital Inputs/Outputs		•
Front Panel LCD		•
PoE+	•	
Power Supply	External (Included)	Internal
Enclosure Size: H x W x D	1.0" x 8.68" x 6.0"	1.66" x 8.68" x 9.5"

The MediaPort 300 and MediaPort 200 have a number of features in common but also have several features that distinguish the two. In general, the MediaPort 300 has improved video and USB capabilities, while the MediaPort 200 excels in a variety of audio features. However, the MediaPort 300 supports AES67 network-based audio, while the MediaPort 200 does not. The MediaPort 300 supports 4K HDMI input resolutions and 4K USB connections to the host PC, while the MediaPort 200 supports 2K resolutions in and out. The MediaPort 300 features a USB-C output connection to the host computer supporting rates up to USB 5 Gbps, while the MediaPort 200 features a USB Type-B connection supporting rates up to High Speed (USB 2). The MediaPort 300 features additional USB control options and the option to supply power via PoE+; all enclosed in a smaller 1" (2.5cm) high enclosure. All in all, the MediaPort 300 offers many advanced features our customers have requested, in a convenient, compact Pro AV enclosure.

SPECIFICATIONS

TRUE 4K SPECIFICATION

Max 4K Capabilities		
Resolution and Refresh Rate	**Chroma Sampling**	**Max Bit Depth per Color**
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz 4096 x 2160 at 30 Hz 3840 x 2160 at 30 Hz	4:4:4	8 bit
		10 bit
4096 x 2160 at 60 Hz 3840 x 2160 at 60 Hz	4:2:0	

Frame rate[1]	24, 25, 30, 50, or 60 fps
Chroma sampling[1]	4:4:4, 4:2:2, or 4:2:0
Color bit depth[1]	8 or 10 bits per color
Signal type	DVI 1.0, HDMI 1.4 and 2.0, HDCP 1.4 and 2.3
Max. video data rate	18 Gbps (6 Gbps per color)

NOTE: [1]Subject to the maximum data rate limit. Use our calculator at www.extron.com/8Kdatarate to determine video parameters supported by this data rate.

NOTE: True 4K specifications apply to the HDMI input and loop out only.

VIDEO INPUT AND LOOP OUT

Number/signal type	1 HDMI/DVI* 1 HDMI/DVI loop out
Connectors	1 female HDMI type A 1 female HDMI type A loop out
Maximum pixel clock	600 MHz
Horizontal frequency	15 kHz to 135 kHz
Vertical frequency	24 Hz to 60 Hz
Resolution range	640x480 to 4096x2160, 480i, 576i, 480p, 576p, 720p, 1080i, 1080p, 2K, and 3840x2160 to 4096x2160, up to 60 Hz
Digital pixel data bit depth	8 or 10 bits per channel
Standards	DVI 1.0, HDMI 1.4 and 2.3, HDCP 1.4 and 2.3

NOTE: *Appropriate HDMI to DVI-D cables or adapters are required for DVI signal input/output.

VIDEO OUTPUT

Number/signal type	1 USB (UVC webcam)
Connectors	1 female USB type C
USB scaled resolutions	640x360[1], 640x480[1], 856x480[1], 960x540[1], 1024x768[1], 720p[1], 1080p[1], 2560x1440[1], 3840x2160[2], 4096x2160[2] [1] = 5 Hz to 60 Hz (in 5-Hz increments), [2] = 5 Hz to 30 Hz (in 5-Hz increments)

NOTE: USB video format, resolution, and frame rate are dependent on the USB host connection (USB 2.0 vs. USB 3.x) and are negotiated by unified communications / lecture capture software on the host PC. Custom Output Group configuration can limit supported resolutions that are advertised to the USB host device during enumeration (such as limiting to only HD rates).

USB ENCODING

Number/signal type	1 USB (scaled, non-HDCP compliant)
Video encoding	MJPEG, YUY2, NV12
Resolution	640x360 through 2560x1440 at up to 60 Hz or 3840x2160 and 4096x2160 at up to 30 fps
Audio	PCM, 24-bit, 48 kHz
USB standards	USB 3.x SuperSpeed 5 Gbps, USB 2.0 High Speed, USB UVC, USB UAC, USB HID

AUDIO

Gain	Unbalanced output, -6 dB; balanced output, 0 dB
Frequency response	20 Hz to 20 kHz, ±0.2 dB

AUDIO INPUT

Number/signal type	1 stereo, de-embedded from HDMI (PCM only) 1 mono mic/line level, balanced or unbalanced (available phantom power on line input 1 only) 1 mono line level, balanced or unbalanced 1 stereo USB (UAC speakerphone)
Connectors	1 HDMI type A (1) 3.5 mm, 6 pole captive screw (2 mono) 1 USB type C female
DC phantom power	Mic/line input 1: +48 VDC ±10% (can be switched on or off for the mic/line input)

AUDIO OUTPUT

Number/signal type	1 HDMI, embedded (loop out) 2 mono or 1 stereo line level, balanced or unbalanced 1 stereo USB (UAC speakerphone)

NOTE: The HDMI loop out audio matches the HDMI source audio.

Connectors	1 HDMI type A (HDMI loop out) (1) 3.5 mm, 6 pole captive screw 1 USB type C female

GENERAL

Power supply	External Input: 100-240 VAC, 50-60 Hz Output: 12 VDC, 1.5 A, 18 watts
Power input	12 VDC from external power supply or Power over Ethernet (PoE+ IEEE 802.3at)
Power over Ethernet (PoE)	Complies with IEEE 802.2at (PoE+), class 4 (type 2)
Ambient temperature/humidity	Storage: -40 to +158 °F (-40 to +70°C) / 10% to 90%, noncondensing Operation: +32 to +122 °F (0 to +50°C) / 10% to 90%, noncondensing
Mounting	
Rack mount	Yes, with optional rack shelf
Furniture mount	Yes, with optional under desk mounting kit
Enclosure dimensions	1.0" H x 8.68" W x 6.0" D (1U high, half rack wide) (25 mm H x 222 mm W x 152 mm D) (Depth excludes connectors.)
Regulatory compliance	CE, c-UL UL,C-tick, FCC Class A, ICES, VCCI, Complies with the appropriate requirements of RoHS, WEEE
Product warranty	3 years parts and labor
Everlast power supply warranty	7 years parts and labor

NOTE: All nominal levels are at ±10%.

Model	Version Description	Part number
MediaPort 300	4K HDMI and Audio to USB Scaling Bridge	60-1873-01

For complete specifications, please go to www.extron.com
Specifications are subject to change without notice.

Extron

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