

NPS Distributed AV Over IP

SDVOE, No Delay And No Compression



NPS AV KVM Over IP

NPS is an SDVoE-Compliant, All-In-One AV over IP solution that provides highest-quality, uncompressed 4K and zero-frame latency audio/video extension over a standard 10G Copper or Fiber Network Switch with instant switching, Video Wall and MultiView functions. It can transfer advanced HDMI content such as HDR (high dynamic range), full color-depth and multichannel HD Bitstream audio. Flexible transceiver design (one box can be set to encoder or decoder) is much convenient in a real installation site and inventory control. Its built-in Secondary Stream supports a high quality, bandwidth configurable H.264/H.265 compression video stream for portable device preview purpose. Multiple control and data signals can be simultaneously transmitted with audio and video, including bi-directional IR, RS-232, USB KVM, CEC and 1G Ethernet.



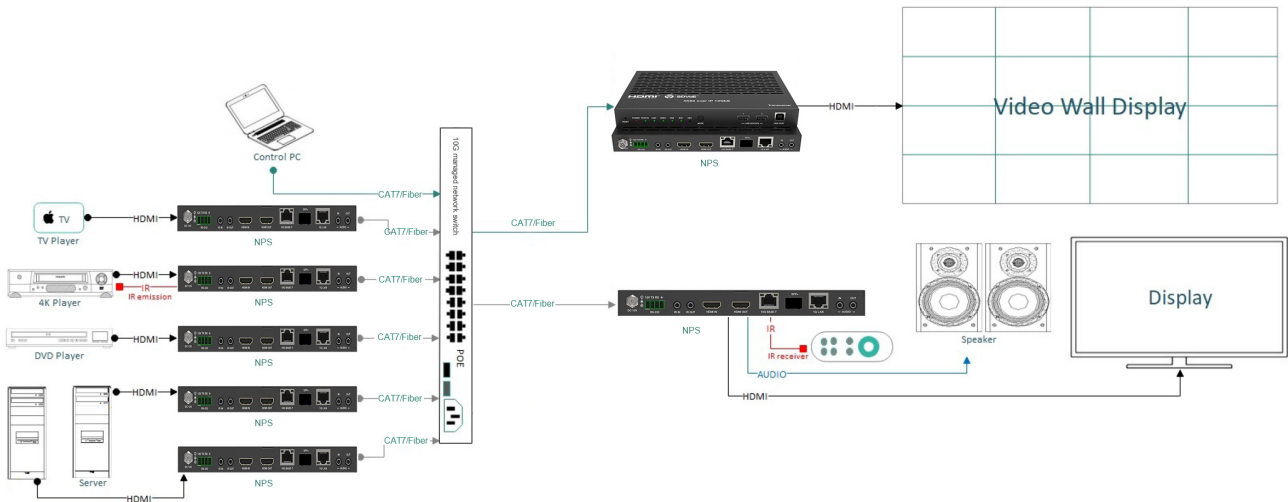
FEATURE

- HDMI 2.0b and HDCP 2.2 compliant
- Support video resolution up to 4K@60Hz 4:4:4, 18Gbps video bandwidth
- Flexible transceiver design (Encoder, Decoder, Copper and Fiber ports within a single box)
- Encoder or Decoder mode can be set via Button or API
- Automatic detection of Fiber and Copper ports (priority can be set)
- Encoder supports HDMI Loop out
- Support HDR10, Dolby Vision, HLG, 3D as well
- Support full HDMI audio formats, up to Dolby TrueHD, Dolby Atmos and DTS-HD, DTS:X
- Support Zero-Frame latency operating mode
- Support signal extension, seamless switching, Matrix, Video Wall up to 9x9 and MultiView up to 25 windows
- Flexible audio routes control including bidirectional analog audio transmissions between Encoder and Decoder
- Built-in H.264/H.265 Secondary Stream (SS) for preview
- Support Secondary Stream VLAN tagging and parameters configuration
- Support bi-directional IR and RS-232 control signal pass-through
- Support USB2.0 (KVM), CEC routing control
- Support IR, RS-232, TCP/IP, Web GUI control
- Standard POE supported (802.3at PD device)
- 10G managed network switch

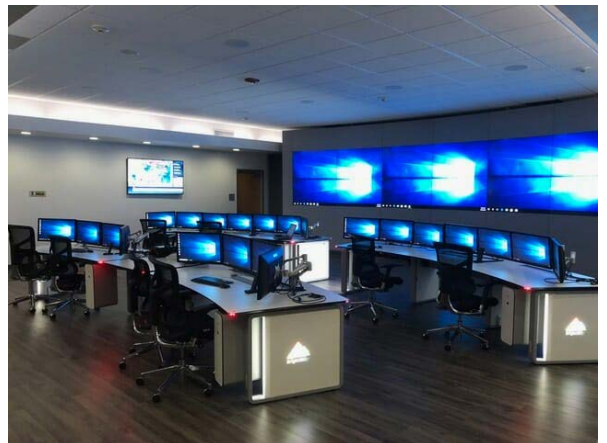
NPS AV KVM

DIAGRAM

NPS AV Over IP System



APPLICATION



SPECIFICATIONS

Parameters	
HDMI Compliance	HDMI 2.0b
HDCP Compliance	HDCP 2.2
Video Bandwidth	18Gbps
Input Format	10GBaseT
Network Video Bandwidth	10G
Video Resolution	Up to 4K@60Hz 4:4:4
Color Space	RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0
Color Depth	Full Color-Depth
HDR	HDR, HDR 10, HDR10+, Dolby Vision, HLG
HDMI Audio Formats	LPCM, Dolby Digital/Plus/EX, Dolby True HD, Dolby Atmos, DTS, DTS-EX, DTS-96/24, DTS High Res, DTS-HD Master Audio, DSD, DTS:X
Analog Audio Formats	Left and Right stereo analog audio
Transmission Distance	100M (CAT6A/7) / 90M (CAT6)
ESD Protection	Human body model — ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
Input ports	1 x HDMI IN [Type A, 19-pin female] 1 x USB 2.0 HOST [Type B, 4-pin female] 1x IR IN [3.5mm Jack] 1x AUDIO IN [3.5mm Jack] 1 x RS-232 [4-pin phoenix connector]
Output ports	1 x HDMI OUT [Type A, 19-pin female] 1x AUDIO OUT [3.5mm Jack] 1 x IR OUT [3.5mm Jack] 2 x USB 2.0 DEVICE [Type-A, 4pin female]
Network ports	1 x 10G BASE-T [RJ45 jack] 1 x 10G SFP+ [Fiber slot] 1 x 1G LAN [RJ45 jack]
Mechanical	
Housing	Metal Enclosure
Color	Black
Dimensions	204mm [W] x 134mm [D] x 21.5mm [H]
Weight	693g
Power Supply	Input: AC100 - 240V 50/60Hz, Output: DC 12V/2.5A (US/EU standards, CE/FCC/UL certified)
Power Consumption	≈13.5W
Operating Temperature	32 - 104°F / 0 - 40°C
Storage Temperature	-4 - 140°F / -20 - 60°C
Relative Humidity	20 - 90% RH (no-condensing)

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