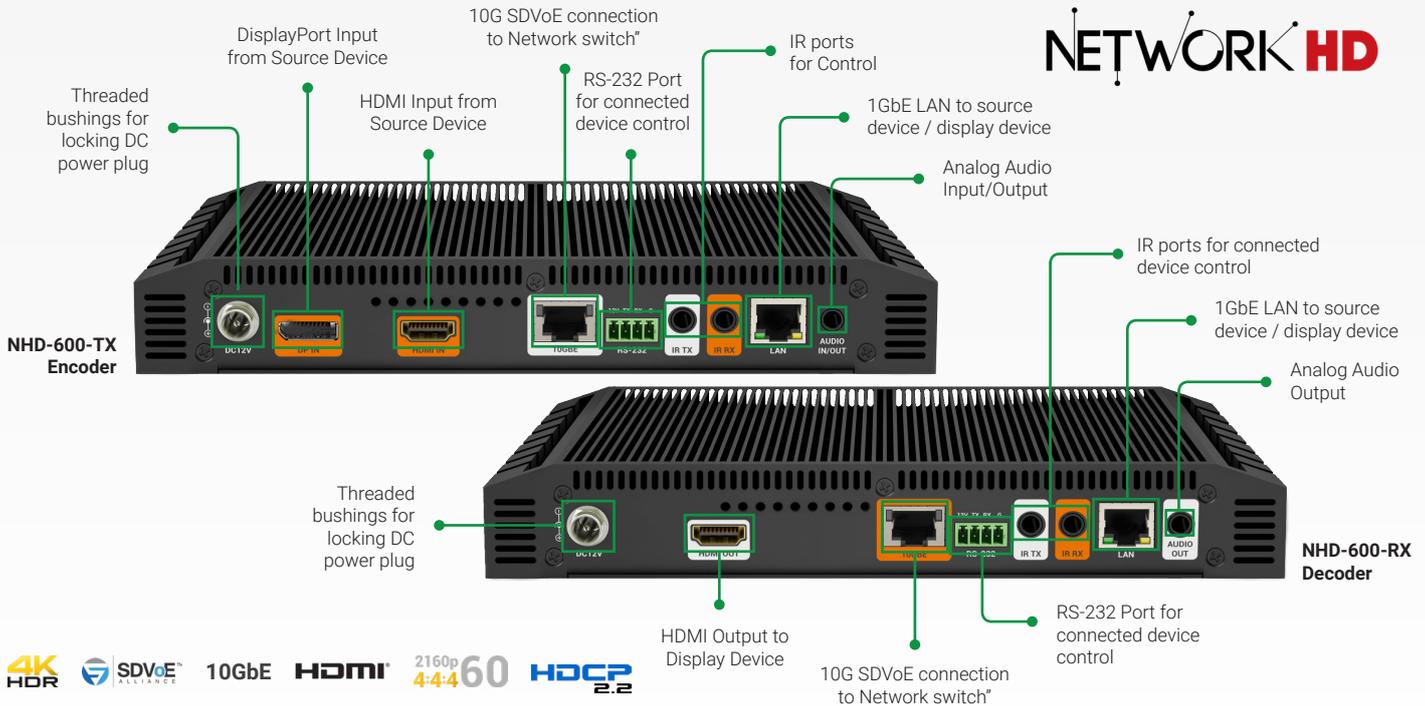


NetworkHD™ 600 Series 4K HDR Premium AV over IP SDVoE Encoder and Decoder

NHD-600-TX | NHD-600-RX



Specification Sheet



4K HDR | SDVoE | 10GbE | HDMI | 2160p 4:4:4 60 | HDCP 2.2

WyreStorm - Because the Technology Matters.

Introduction

The NetworkHD™ Premium AV over IP SDVoE Encoders and Decoders offer the ultimate AVoIP platform. Supporting highly scalable, high-bandwidth, secure video content alongside multi-channel audio and a plethora of connectivity and control options the 10GbE system is easily managed in a flexible, unified software environment. Utilizing the SDVoE technology standard, truly lossless and latency-free video distribution can be achieved over IP networks.

Key Features

- Highly scalable deployment utilizing multicast IP streams can achieve I/O numbers unthinkable by traditional fixed matrix alternatives
- Supports 4K UHD and DCI resolutions at upto 60fps RGB or YUV 4:4:4
- HDCP 2.2 and HDCP 1.x support
- HDMI or DisplayPort source input with optional auto-switch function
- Powerful video scaling can match a connected display to the video source, leaving the original source content unaltered
- Video resolution, framerate and color space conversion using NHD-600-RX
- Genlock mode for zero millisecond end-to-end latency
- Supports ultra-fast, seamless AV source switching
- Secondary video stream with alternate scaling options can be used for Multiview source content using NHD-600-RX*
- Fully-featured Multiview image compositing includes arbitrary source window placement, resizing, image duplication and image offset functions*
- Video wall functionality with NHD-600-RX, including display bezel compensation*
- Audio capability for transport of multichannel audio, including Dolby Atmos and DTS:X
- Multichannel PCM digital audio downmix supported
- TX Analog audio port can be configured as an input for a discrete audio stream or audio embedding
- Analog audio ports can be configured to de-embed audio from the main stream, stream downmix or analog channels
- Full EDID management
- Bidirectional IP to Infrared/RS-232 functionality via API or 3rd-party drivers**
- Auxilliary 1GbE Ethernet channel for network connectivity of attached source devices
- Powerful matrix functionality includes routing control of all audio, video, RS-232 and IR signals
- Exclusive, ingenious passive chassis design eliminates fan noise and maintenance concerns whilst maintaining class-leading thermal cooling
- Software configuration environment is uniform across the entire NetworkHD family, removing any learning curve across the different NetworkHD Series
- 3rd-party control systems integration drivers freely available from wyrestorm.com

*Multiview and videowall functions available with future firmware update
 ** IR data receiver decoding to API / Driver in Pronto HEX format available with future firmware update

In the Box

- 1x NHD-600-TX or NHD-600-RX
- 1x 12v DC Power Supply (US | EU | UK)
- 1x IR Emitter
- 1x IR Receiver
- 1x 4-Pin Male Phoenix Connector
- 2x Wall Mounting Bracket
- 4x Feet for Shelf Mounting
- 1x Quickstart Guide

Specifications

Audio and Video		
	NHD-600-TX	NHD-600-RX
Inputs	1x DP In: DisplayPort 20-pin 1x HDMI In: 19-pin type A 1x Audio In/Out: 3.5mm (1/8in) TRS Stereo	1x 10GbE: 8-pin RJ-45 Female
Outputs	1x 10GbE: 8-pin RJ-45 Female 1x Audio In/Out: 3.5mm (1/8in) TRS Stereo	1x HDMI Out: 19-pin type A 1x Audio Out: 3.5mm (1/8in) TRS Stereo
Output Video Encoding	SDVoE	
Encoding Data Rate	Max: 10Gb/s	
End to End Latency (Max)	Genlock Mode: Uncompressed = 30us, Compressed <120us Fast Switch Mode: 1~2 video frames = min. between 16.7 – 33.4ms @ 60fps	
Audio Formats	2ch PCM Multichannel: LPCM and Up to Dolby Atmos and DTS-X	
Video Resolutions (Max)	2160p @60Hz 8bit 4:4:4 2160p @60Hz 12bit 4:2:2	
Color Depth	1080p: 12bit 2160p: 12bit 4:2:2 / 8bit 4:4:4	
Maximum Pixel Clock	595 MHz	
3D	HDMI 1.4b 3D: TnB, Sbs, F.P	
Communication and Control		
HDMI	HDMI HDCP 2.2	
Ethernet	1x 10GbE SDVoE: 8-pin RJ-45 Female 10GBASE-T 1x LAN: 8-pin RJ-45 Female 1000BASE-T	
IR	1x IR TX: 3.5mm (1/8in) TS Mono Jack 2 Way Broadcast Routed API Programmable 1x IR RX: 3.5mm (1/8in) TRS Stereo Jack 2 Way Broadcast Routed API Programmable	
RS-232	1x RS-232: 4-pin Phoenix Connector 2 Way Broadcast Routed API Programmable	
Power		
Power Supply	12V DC 3A	
Max Power Consumption	TX: 15.24W RX: 18.64W	
Environmental		
Operating Temperature	0 to + 45°C (32 to + 113 °F), 10% to 90%, non-condensing	
Storage Temperature	-20 to +70°C (-4 to + 158 °F), 10% to 90%, non-condensing	
Maximum BTU	TX: 52 BTU/hr RX: 63.6 BTU/hr	
Dimensions and Weight		
Rack Units/Wall Box	<1U	
Height With Without Feet	45mm/1.78in 35mm/1.38in	
Width With Without Brackets	263.6mm/10.38in 230mm/9.06in	
Depth With Without Handles	139mm/5.48in	
Weight	1.52kg/3.34lbs	
Regulatory		
Safety and Emission	CE FCC RoHS	

Right Product for the Right Application.

