WyreStorm[®] NetworkHD[™] 100 Series HD over IP Encoder and Decoder

NHD-100 Series



Key Features:

- Highly scalable, visually lossless HD over IP solution using the most efficient compression technology to allow for very large commercial AV deployments
- · Plug and Play setup with automatic networking configuration and auto discovery of components
- Quick Sync™ technology for virtually instantaneous, seamless switching
- CEC One-Touch Play & Standby or RS-232 control of connected displays

The WyreStorm NetworkHD 100 is our premier H.264 HD over IP distribution platform. With its simple system configuration and robust feature set, it provides the best value in networked video distribution, without compromising quality. Enabling the distribution of HDMI over a dedicated IP network switch for commercial AV applications.

NetworkHD 100 facilitates the transmission of an HDMI 1.3 signal (including Full HD 1080p video with 2.1 audio) to any number of HDMI displays over standard Ethernet (Cat5e/6) infrastructure.

The modular system architecture of NetworkHD 100 removes the limitations of a traditional fixed platform I/O matrix system without compromising quality or reliability, whilst offering significant cost savings when designing large scale installations. Adding transmitters and receivers as required enables the system to grow with the needs of the application.

Additional Features & Benefits:

- Supports video previewing on a PC or third party device. NetworkHD 100 outputs simultaneous IP streams. One full resolution for the NHD-100-RX. The other small one supports resolutions of 352 x 288 @ 5Hz to easily preview a video from the encoder on a PC or Mac
- Supports PoE to enable remote powering from PoE network switches, eliminating the need for a nearby power outlet
- Use with the new NHD-000-CTL controller for simple configuration and control via the LAN, as well as for allowing control from third party control system such as AMX, Crestron, Control4, RTI & WyreStorm Enado™.
- Full PC control suite available free of charge at wyrestorm.com
- Supports HDCP
- Configurable encoding bit rate up to 40Mbps

In The Box

NHD-100-TX

1x NHD-100-TX Transmitter

1x 12V DC 1A Power Supply

1x Detachable Plug

2x 3-pin Screw Down Phoenix Connector

2x Mounting Brackets

NHD-100-RX

1x NHD-100-RX Receiver

1x 12V DC 1A Power Supply

1x Detachable Plug

3x 3-pin Screw Down Phoenix Connector

2x Mounting Brackets

NHD-000-CTL

1x NHD-000-CTL Controller

1x 12V DC 1A Power Supply

1x 3-pin Screw Down Phoenix Connector

2x Mounting Brackets

5x IP labels



Specifications - NHD-100-TX		
Input Video Ports	1× HDMI IN	
Input Video Type	HDMI 1.3	
Input Video Resolutions	HDMI: 640 x 480 @ 60Hz, 480p @ 60Hz, 576p @ 50Hz,	
	800 x 600 @ 60Hz, 1024 x 768 @ 60Hz, 720p @ 50Hz, 720p @ 60Hz,	
	1280 x 800 @ 60Hz, 1280 x 1024 @ 60Hz, 1360 x 768 @ 60Hz,	
	1366 x 768 @ 60Hz, 1400 x 1050 @ 60Hz, 1440 x 900 @60Hz,	
	1680 x 1050 @ 60Hz, 1080p @ 24Hz, 1080p @ 25Hz, 1080p @ 30Hz,	
	1080p @ 50Hz, 1080p @ 60Hz, 1920 x 1200 @ 60Hz	
Input Video Signal	0.5 ~ 1.2 V p-p	
Encoding Data Rate	Up to 40Mbps, configurable	
Output Video Ports	1x LAN	
Output Video Type	H.264/MPEG-4 AVC	
Output Video Resolutions	Large IP stream: 480p @ 60Hz ~ 1920 x 1200 @ 60Hz, Small IP stream: 352 x 288 @ 5Hz	
Video Impedance	100Ω	
Input DDC Signal	5V p-p (TTL)	
End-to-End Time Latency	About 60 ms-90 ms (Low latency mode), About 250 ms-300 ms (High quality mode)	
Supported Audio Format	2ch (Stereo)	
Output Audio Ports	1 x Phoenix Connector	
Control Method	Rear panel source switch, PC configurator and RS-232	
Operating Temperature	+32°F ~ +113°F (0°C ~ +45°C) 10% ~ 90%, non-condensing	
Storage Temperature	-4°F ~ 140°F (-20°C ~ +70°C) 10% ~ 90%, non-condensing	
Power	12V DC 1A	
Power Consumption	6W (Max.)	
ESD Protection	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)	
Surge Protection	Voltage ±1 kV	
Product Dimensions (WxHxD)	200mm x 25 mm x 94mm / 7.9" x 1.0" x 3.7"	
Weight	0.48Kg	
Certification	CE, FCC, RoHS compliant	
·		

Specifications - NHD-100-RX	
Input Video Ports	1× LAN
Input Video Type	H.264/MPEG-4 AVC
Input Video Resolutions	480p @ 60Hz ~ 1920 x 1200 @ 60Hz
Output Video Ports	1x HDMI
Output Video Type	HDMI 1.3
Output Video Resolutions	HDMI: 480p @ 60Hz, 576p @ 50Hz, 800 x 600 @ 60Hz, 1024 x 768 @ 60Hz,
	720p @ 50Hz, 720p @ 60Hz, 1280 x 800 @ 60Hz, 1280 x 1024 @ 60Hz,
	1366 x 768 @ 60Hz, 1440 x 900 @ 60Hz, 1600 x 1200 @ 60Hz,
	1680 x 1050 @ 60Hz, 1080p @ 24Hz, 1080p @ 25Hz, 1080p @ 30Hz,
	1080p @ 50Hz, 1080p @ 60Hz, 1920 x 1200 @ 60Hz
Video Impedance	100Ω
End-to-End Time Latency	About 60 ms-90 ms (Low latency mode), About 250 ms-300 ms (High quality mode)
Input Audio Ports	1x LAN
Power	12V DC 1A
Power Consumption	6W (Max.)
ESD Protection	Human body model: ±8kV (air-gap discharge ±4kV (contact discharge)
Surge Protection	Voltage ±1 kV
Product Dimensions (WxHxD)	228mm x 25 mm x 111mm / 9'.0' x 1.0" x 4.4"
Weight	0.6Kg
Certification	CE, FCC, RoHS compliant

NetworkHD 100 uses multiple technologies to automatically configure and discover system components, making setup a breeze. Functioning on 10/100 or Gigabit Layer2 SMART switches, NetworkHD 100 does not require advanced integrator network experience to install, nor does it require complicated VLAN configurations or PC software, making it one of the simplest HD over IP systems available. Configuring network switches takes minutes through your browser and even the largest distributions can be quickly and easily configured and expanded.

The NHD-000-CTL controller creates a simple, single interface to configure, manage and control the entire NetworkHD 100 system, whilst also capable of fully integrating with leading control brands including WyreStorm Enado for the highest quality total HD distribution and control solution over a network.

For further information on this product and other WyreStorm ranges, visit our website or download our latest product guide at wyrestorm.com





