NGS-D320 Pro

Compact 4K dual channel H.264 encoder and decoder



- **Superb Visual Experience**
- **Simple Integration**
- **No Adjustment Needed**
- **Performance**

The NGS-D320 Pro is a versatile and powerful networked H.264 encoder and decoder. Its elegant design, small form factor and silent operation allows the device to be used in any situation, both in office environments and in 24/7 mission critical applications.

Due to its versatility, the NGS-D320 Pro can be configured at runtime as dual encoder, dual decoder or combined encoder & decoder, both for DVI, HDMI and DisplayPort content, with or without audio & USB HID. The combination of these functions, with integrated keyboard and mouse control in a single unit, is ideal to create a seamless environment for application sharing, simulation and training.

Key features:

- Superb Visual Experience:
  The NGS-D320 Pro comes with Barco's latest dual channel image processing engine, which provides the best scaling and color space conversion algorithms on the market today. When distributing graphics, the encoder preserves even the smallest details, making it suitable to encode images like spreadsheets or single pixel line diagrams.

- Simple Integration:
  The device automatically starts streaming whenever a valid input signal is connected. The stream is automatically set up using the most optimal settings based on input resolution and bandwidth. In addition, the discovery page of the web interface gives an overview of all available devices in the network, making system configuration easy.

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  With automatic EDID management and scaling at the decoding side, the best experience in distributing graphics and video over IP is guaranteed. Fiddling with displays to get a good picture is thus unnecessary. Switching from one source to another is fluent and does not require the display to re-sync to the new signal. The decoder can also both upscale and downscale to match the preferred display settings.

- Performance:
  The NGS-D320 Pro has two independent channels which can each be configured as encoder or decoder. As encoder, it exposes a dual link DVI, an HDMI 1.4 and/or a DisplayPort 1.1a input (supporting resolutions up to 4096x2160 (DCI) and featuring active pass-through connectivity). Encoding in full and lower frame rates are possible, allowing to define the quality/bandwidth balance. Encoder latency is below 40ms, giving an end to end latency of below 100ms. For resolutions up to Full HD, the end to end latency can even be more reduced to less than 64ms using an ultra low latency profile.

PRODUCT SPECIFICATIONS	NGS-D320 PRO
Number of inputs and outputs	
Audio	1 3.5mm jack stereo line level in & line out 1 3.5mm jack mono mic in & stereo headphones out (combined)
USB	3 Type A connectors, 1 Micro-B connector
Network	RJ45 (redundant 1Gb Ethernet copper)
Video	1 Dual Link DVI & 1 DisplayPort 1.1a & 1 HDMI 1.4 input 1 Dual Link DVI & 1 DisplayPort 1.2 & 1 HDMI 1.4 output Flexible Loop Through Maximum input bandwidth of 330Mhz
Network interfaces	
Ethernet	2x 1GbE full duplex
IP addressing	DHCP, link local, fixed IP
Protocols	Unicast, Multicast (IGMP v3), RTP, RTSP
RTSP Sessions	Multicast: maximum 12 simultaneous RTSP session per channel Unicast : maximum 2 simultaneous RTSP session per channel
Discovery	Zeroconf, SAP (RFC 2974)
Management interfaces	
Firmware upgrade	HTTPS Web interface, USB Storage Device
Standalone	HTTPS Web interface
Advanced features	
Image processing	Color space conversion, scaling, frame rate reduction
Automatic downscaling	Y (Adjust to profile)
Remote keyboard and mouse	Supported (native keymap)
General specifications	
Dimensions	38 mm H x 170 mm W x 170 mm D | 1.5" H x 6.7" W x 6.7" (+/-2mm / 0.1")
Weight	1 ± 0.01 kg (2.20 lbs)
Power	Typical 35W, maximum 48W
Power supply	12VDC, 100-240VAC 60W, external locking power
Operating temperature	0°C to 40°C (32°F to 104°F)
Storage temperature	-20°C to 70°C (-4°F to 158°F)
Sound level	Typical 32dBA at 20°C
Mounting	Optional VESA adapter plate or 1U rack mount for 2 devices

PRODUCT SPECIFICATIONS	NGS-D320 PRO
Certification	
EMC	CE, FCC Part 15 Class A, ICES-003
Safety	UL/ cUL/ EN/ IEC 60950-1 CB report
Packaging characteristics	
Dimensions (packaged)	382mmx273mmx85mm | 15,04"x10,75"x3,35"
Weight (packaged)	2.2 kg | 4.8 lbs
NGS-D320 Pro	
Number of channels	Up to 2
Number of streams	Up to 2
Graphics	640x480 -2560x1600 24-60Hz 640x480 -4096x2160 24-30Hz
Audio	uncompressed
Codec	Video: H.264 up to level 5.1 -60fps: up to 1920x1200 (2x) -30fps: up to 2560x1600 (2x) -60fps: up to 2560x1600 (1x) -30fps: up to 4096x2160 (1x) (version 2.1 or higher)
Bandwidth	Video: H.264 384 kbps – 24 Mbps Audio: uncompressed
Latency encoder-decoder end-to-end	80-200ms (typical 100ms)
Boot time	15s

Last updated: 14 Dec 2018

Technical specifications are subject to change without prior notice. Please check www.barco.com for the latest information.