

NGS-D320 FLEX

Compact 4K single channel H.264 & V2D Encoder



- **Superb Visual Experience**
- **Simple Integration**
- **No Adjustment Needed**
- **Performance**
- **Flexible switching between the H264 or V2D protocol**
- **Part of the TFN and OpSpace Product families**

The NGS-D320 FLEX is a versatile and powerful networked H.264 and V2D encoder. 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 FLEX can be configured at runtime as an encoder, both for DVI, HDMI™ and DisplayPort content, with or without audio and USB KB/M. Unique in the market, it supports 2 types of streaming protocols (H264 and V2D) in a flexible way, enabling the best possible user experience for a wide variety of use-cases. 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 FLEX comes with Barco's latest 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. The device is validated to work in Barco Transform N 3.3 or higher and OpSpace 1.4 or higher.
- **No Adjustment Needed**With automatic EDID management, the best experience in distributing graphics and video over IP is guaranteed.
- **Performance**The NGS-D320 FLEX comes with a dual link DVI, an HDMI™ 1.4 and a DisplayPort 1.1a input. All inputs support resolutions up to 4096 x 2160 (DCI) and feature active pass-through connectivity. Encoding in full frame rate or lower frame rates are possible, allowing you to define the quality/bandwidth balance. The encoder latency is below 40ms enabling the foundation for a low end-to-end latency in a broad variety of systems.

Product specifications

NGS-D320 FLEX

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 (1Gb 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, DNS, NTP
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

Certification

EMC	CE, FCC Part 15 Class A, ICES-003
Safety	UL/ cUL/ EN/ IEC 60950-1 CB report
Regulatory name	NGS-D320

Packaging characteristics

Dimensions (packaged)	382mmx273mmx85mm 15.04"x10.75"x3.35"
Weight (packaged)	2.2 kg 4.8 lbs

NGS-D320 Flex

Number of channels	1
Number of streams	1
Graphics	640x480 -2560x1600 24-60Hz 640x480 -4096x2160 24-30Hz
Audio	16bit 48kHz stereo
Codec	Video: H.264 up to level 5.0 or V2D -60fps: up to 1920x1200 (1x) -30fps: up to 2560x1600 (1x) -15fps: up to 4096x2160 (1x)
Bandwidth	Video: H.264 384kbps – 12 Mbps V2D 25Mbps – 100Mbps Audio: uncompressed
Latency encoder-decoder end-to-end	80-200ms (typical 100ms)
Boot time	15s

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