# 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**

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

- 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<br>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<br>1 Dual Link DVI & 1 DisplayPort 1.2 & 1 HDMI 1.4 output<br>Flexible Loop Through<br>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<br>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 FLEX |
|---|---|
| **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 Lite** | |
| Number of channels | 1 |
| Number of streams | 1 |
| Graphics | 640x480 -2560x1600 24-60Hz<br>640x480 -4096x2160 24-30Hz |
| Audio | 16bit 48kHz stereo |
| Codec | Video: H.264 up to level 5.0 or V2D<br>-60fps: up to 1920x1200 (1x)<br>-30fps: up to 2560x1600 (1x)<br>-15fps: up to 4096x2160 (1x) |
| Bandwidth | Video:<br>H.264 384kbps – 12 Mbps<br>V2D 25Mbps – 100Mbps<br>Audio: uncompressed |
| Latency encoder-decoder end-to-end | 80-200ms (typical 100ms) |
| Boot time | 15s |

**Last updated: 10 May 2019**

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