

NGS-D320 Pro

Compact 4K dual channel H.264 encoder and decoder



- **Superb Visual Experience**
- **Simple Integration**
- **No Adjustment Needed**
- **Performance**
- **Part of the TFN and OpSpace Product families**

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.
- **No Adjustment Needed:** 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



- No Adjustment Needed: 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 |
| 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 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 |

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