

MNA-420 ENC -H

HD AV-to-IP adapter for the OR and hybrid OR with HDMI™ technology



- AV-to-IP conversion
- 2 x FHD resolution
- Medical-grade
- Established 3rd generation technology

Adapter for the operating room

The MNA-420 ENC -H with HDMI™ technology converts HDMI 2.0 video signals to Nexxis RAW IP packets. Other non-video signals such as audio and USB for keyboard/mouse are also supported. End-to-end video latency is amazingly low and is guaranteed not to exceed a single frame.

Capabilities

The MNA-420 adapters are part of Barco's Nexxis solution, which provides users with uncompromised networked visualization for the digital operating room. The compact Nexxis AV-to-IP adapters offer simplicity and flexibility while maintaining the highest possible performance standards and fitness for use in demanding medical environments.

As a third generation device, the MNA-420 ENC -H with HDMI™ technology provides the full richness of the established Nexxis platform while:

- increasing future scalability
- improving ease of installation
- adding increased security performance
- reducing ecological footprint

Product specifications

MNA-420 ENC -H

General specifications

| | |
|------------------------|--|
| Video conversion | Converts digital video signals to uncompressed IP streams |
| Processing | 1920x1200p 60 per input channel |
| Color depth | RGB24 8-bit; YCbCr 4:2:0 (8-bit & 10-bit); YCbCr 4:2:2 (8-bit & 10-bit); YCbCr 4:4:4 (8-bit) |
| Latency | Subframe |
| Security | AES 128 encryption of all video, data & control signals |
| Encoder system | N/A |
| Video Output | N/A |
| Video Input | 2x HDMI 2.0 lockable connector |
| Network output | 2x HD uncompressed IP stream over a single optical connection |
| IP Connectivity | 1x 10GbE Fiber Optic Interface with SFP+ module |
| IP Standards | Zeroconf, IPv4, IGMP, DHCP, sRTP, sRTCP, 802.1q, AES 128b, HTTP(s) |
| USB | 1x micro-USB type B & 1x USB Type A |
| USB Power Output | Max. 5 V / 500 mA (2.5 W) per USB 2.0 Type-A port |
| Audio | Stereo line in and Headset/Stereo line out 15mm length compatible 3.5mm TRRS jack |
| Compliance | N/A |
| GPIO | 2x GPI + 1x GPO via 15mm length compatible 3.5mm TRRS jack Camera trigger is possible via stereo line in (1x) and GPIO (2x) connector |
| Nexxis Integration | Fully integrated in the Nexxis solution, compatible with MNA-1x0, MNA-240 and MNA-4x0 devices |
| NexxisPlus Integration | N/A |
| PSU | External 12Vdc Medical Approved PSU, 100-240VAC 50-60Hz 60W with lockable connector at DC side |
| Power Consumption | Maximum: 25W Typical: 15W |
| Size | 35 mm H x 103 mm W x 131 mm 1.4" H x 4.1" W x 5.2" D (+/-2 mm / 0.1") |
| Weight | 0,4 kg (0.88 lbs) |
| Temperature | 5°C to 40°C (41°F to 104°F) |
| Humidity | Maximum 85% |
| Altitude | 700 hPa |
| Storage conditions | Storage temperature: -20°C to 60°C (-4°F to 140°F) Storage relative humidity: 10% to 93% Storage altitude: 500 hPa |
| Acoustic noise level | Typical 32dBA at 20°C at 1m |
| Mounting | Versatile mounting bracket included |
| Certifications | -CB (IEC 60601-1) -CB (IEC 62368-1) -cRU, RU (cRUUs) -Demko -CE medical device class I -UKCA -BIS Registration, IS 13252 (part 1) |
| Standards | Medical Equipment: -IEC 60601-1:2005 + A1:2012 + A2:2020 -IEC 60601-1-6:2010 + A1:2013 + A2:2020 -IEC 60601-1-2:2014+A1:2020 (Ed.4.1) -AAMI ES 60601-1:2005 + A1:2012 + A2:2021 -CAN/CSA-C22.2 No.60601-1:08 + A1:14 (Reaffirmed 2022) -EN 60601-1:2006 + A1:2013 + A12:2014 + A2:2021 + A13:2024 -EN 60601-1-6:2010 + A1:2015 + A2:2021 -EN 60601-1-2:2015+A1:2021 (Ed.4.1) -FCC class B -ICES-001 Level B ITE Equipment: -IEC 62368-1:2018 -EN IEC 62368-1:2020 + A11:2020 -IS 13252 (Part1): 2010 |
| 3D Video Support | The following video formats are supported: -1920x1080@60Hz Line-interleaved -Dual-stream 1920x1080@60Hz (using both input channels) |
| Streamback | N/A |

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