

MNA-420 DEC -H

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



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

Adapter for the operating room

The MNA-420 DEC -H with HDMI™ technology converts uncompressed IP video streams to HDMI 1.4 video. 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 DEC -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 DEC -H

General specifications

Video conversion	Converts uncompressed IP-streams into Digital video signals
Processing	Or: up to 1920x1200p60 on each of the two output channels Or: up to 4096x2160p60 on one output channel with content restricted to a composition of 2 images with maximum resolution 1920x1200p60
Color depth	RGB24 8-bit
Latency	When genlocked, the end-to-end latency is subframe
Security	Decryption of AES 128 encrypted video, data & control signals
Encoder system	N/A
Video Output	2x HDMI 2.0 lockable connector
Video Input	N/A
Network output	N/A
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	2x 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	Supported from Nexxis R1.14 onwards, 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: 17W
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	Show one view of the 3D video flow (left eye) on a 2D display
Streamback	Streamback of display content supported

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