MNA-440 ENC SDI

4K AV-to-IP adapter for the OR and hybrid OR

- **AV-to-IP conversion**

- **Up to 4K resolution**

- **Medical-grade**

- **Established 3rd generation technology**

Adapter for the operating room

The MNA-440 ENC SDI converts 2x 3GSDI or 1x 12GSDI or 1x QUAD SDI 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. The video streams that are distributed over the Nexxis network can go up to a resolution of 4K.

Capabilities

The MNA-440 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-440 ENC SDI provides the full richness of the established Nexxis platform while:

- increasing future scalability

- improving ease of installation

- adding increased security performance

- reducing ecological footprint

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Product specifications	MNA-440 ENC SDI
General specifications	
Video conversion	Converts digital video signals to uncompressed IP streams
Processing	4096x2160p60 on a single 12G-SDI input or 4096x2160p60 on a quad 3G-SDI input or 1920x1080p60 on each of the two 3G-SDI input channels
Color depth	YCbCr 422: 8-bit / 10-bit
Latency	Subframe
Security	AES 128 encryption of all video, data & control signals
Encoder system	N/A
Video Output	N/A
Video Input	3G/12G-SDI standard BNC connector on input channel 1 3G-SDI standard BNC connector on input channel 2, 3 and 4
Network output	1x 4K/UHD uncompressed IP stream & 1x downscaled FHD IP stream of native 4K/UHD source Or 2x HD uncompressed IP stream
IP Connectivity	2x 10GE Fiber Optic Interface with SFP+ connector module
IP Standards	Zeroconf, IPv4, IGMP, DHCP, sRTP, sRTCP, 802.1q, AES 128b, HTTP(s)
USB	1x USB Type A
Audio	Headset/Stereo line out 15mm length compatible 3.5mm TRRS jack
Compliance	N/A
GPIO	1x GPI (1x camera trigger) via 15mm length compatible 3.5mm TRRS jack
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: 20W Typical: 13,6 W
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
Mouting	Versatile mounting bracket included
Certifications	-CB (IEC 60601-1) Informative report -CB (IEC 60950-1) -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) -ANSI/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 -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: 1920x1080p60Hz Line-interleaved 1920x1080i60Hz Line-interleaved Level B (vpid 0x8C) Dual-stream 1920x1080p60Hz (using first two-SDI input channels) UHD/4K60 3D Line interleaved half height: 3840/4096x1080 per view
Streamback	N/A

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