

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

PRODUCT SPECIFICATIONS**MNA-440 ENC SDI**

Video conversion	Converts Digital video signals to uncompressed IP streams
Processing	4096x2160@60Hz on a single 12G-SDI input, or 4096x2160@60Hz on a quad3G-SDI input, or 1920x1080@60Hz on each of the two 3G-SDI input channels
Color depth	YCbCr 4:2:2 10-bit
3D technology	The following video formats are supported: <ul style="list-style-type: none">■ 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
Latency	Subframe
Security	AES 128 encryption of all video, data & control signals
Video Input	3G/12G-SDI standard BNC connector on input channel 1 3G-SDI standard BNC connector on input channel 2, 3 and 4
Video Input	Interface: 4x SDI (lockable connectors) supporting 3G SDI on SDI In 1&2, 12GSDI on SDI In 1 and QUAD 3G-SDI via SDI In 1, 2, 3 & 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 10GbE Fiber Optic Interface with SFP+ module
IP standards	Zeroconf, IPv4, IGMP, DHCP, RTP, RTCP, 802.1q, AES 128b, HTTP(s)
USB	1x USB Type A
Audio	Headset/Stereo line out 15mm length compatible 3.5mm TRRS jack
GPIO	1x GPI + 1x GPO + 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
PSU	External 12VDC Medical Approved PSU, 100-240VAC 50-60Hz 60W with lockable connector at DC side
Power consumption	Maximum: 20W Typical: 13.6W

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Size	35 mm H x 103 mm W x 131 mm D 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%
Storage	Storage temperature: -20°C to 60°C (-4°F to 140°F) Storage Relative Humidity: 10% to 93%
Acoustic Noise	Typical 32dBA at 20°C at 1m
Mounting	Versatile mounting bracket included
Certifications	<ul style="list-style-type: none">■ CB (IEC 60601-1)■ CB (IEC 60950-1)■ cUL, UL (cULus)■ Demko■ CE medical device class I■ BIS
Standards	<p>Medical Equipment:</p> <ul style="list-style-type: none">■ IEC 60601-1:2005 + Am1:2012■ IEC 60601-1-6:2010 + Am1:2013■ IEC 60601-1-2:2014 (ed4)■ ANSI/AAMI ES 60601-1: A1:2012 + C1:2009/(R)2012 + A2:2010/(R)2012■ CAN/CSA-C22.2 No.60601-1:14■ EN 60601-1:2006 + A1:2013 + A12:2014■ EN 60601-1-6:2010 + A1:2015■ EN 60601-1-2:2015 (ed4)■ FCC class B■ ICES-001 Level B <p>ITE Equipment:</p> <ul style="list-style-type: none">■ IEC 60950-1:2005 + Am1:2009 + Am2:2013■ EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011■ IS 13252

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