

MediorNet H.264 Encoder

MediorNet H.264 The WAN Solution for IP Networks



The MediorNet H.264 family consist of encoders and decoders for live transmission of Audio and Video Signals over IP based wide area networks (WAN) like the public Internet or IP based satellite connections. The system is perfectly designed and well integrated to connect different local MediorNet installations over IP networks to overcome huge distances. With this combination you get the full power and potential of MediorNet and IP based solutions for your growing media network. From campus networks to worldwide AV-Infrastructure. For contribution applications it is also possible to use the systems stand-alone with the ability to transmit the AV-Signals directly between two locations in an IP network.

Unique Transmission with COTP

- Unique usage of Code One Transport Protocol for reliable point to point transmission
- Bonding (real channel bonding / provider independent) for bandwidth aggregation and fail over (more than simple hitless switching)
- DBRM: Dynamic Bit Rate Management for IP networks with changing bandwidth
- FEC: Forward Error Correction, for error protection for public networks
- RTM: Re-Transmission Management for highly important content



System Characteristics

- Tight MediorNet Integration
- High Quality H.264 Encoding of SD and HD-Signals in 4:2:0 8 Bit or 4:2:2 8 Bit/10 Bit
- Encoding bitrate from 1 MBit/s to 40 MBit/s
- End to end latency below 1 sec
- Compact 1RU design for rackmount and standalone applications

Signal Inputs and Outputs

- SD/HD Analog and Digital Audio/Video Inputs
- up to 8 Channels of Audio Transmission per Video-Signal
- Genlock Input

Remote Control

- Flexible control, choose between:
 - direct integration and operability out of MediorWorks
 - On-Screen GUI with a connected display
 - Web browser remote control

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Technical Specifications

Version	MN-H264-E-Basic	MN-H264-E-Plus
Form Factor	19", 1RU	
Power Supply	100 ... 240 VAC, redundant	

Encoding

Codec	H.264	
Encoding Color Depth	8 Bit	8 Bit + 10 Bit
Encoding Color Subsampling	4:2:0	4:2:0 + 4:2:2
Encoding Bitrate	1 ... 20 MBit/s	1 ... 40 MBit/s
Signal Processing	Framerate and Resolution Conversion	

Supported Formats

SD	625/25 PAL, 525/29.97 NTSC, 525/23.98 NTSC.
HD	720p50, 720p59.94, 720p60, 1080PsF23.98, 1080p23.98, 1080PsF24, 1080p24, 1080PsF25, 1080p25, 1080PsF29.97, 1080p29.97, 1080PsF30, 1080p30, 1080i50, 1080i59.94 and 1080i60

Connections

SDI connection	SD-SDI (SMPTE 259M) and HD-SDI (SMPTE 292M)	
HDMI connection	SD and HD, 1 x HDMI type A connector	
Genlock	n/a	Blackburst in SD, 720p50, 720p59.94, 1080i50 and 1080i59.94 formats or Tri-Sync in any HD format
SDI Embedded Audio	8 Channels in SD and HD	
Analog Video	n/a	1 x Component video on 3 BNCs, 1 x S-Video on S-Video connector, 1 x Composite NTSC/PAL on 1 BNC
AES Audio	n/a	2 Channels unbalanced with sample rate converter
Analog Audio	n/a	4 Channels of professional balanced analog audio via 1/4" jack connectors

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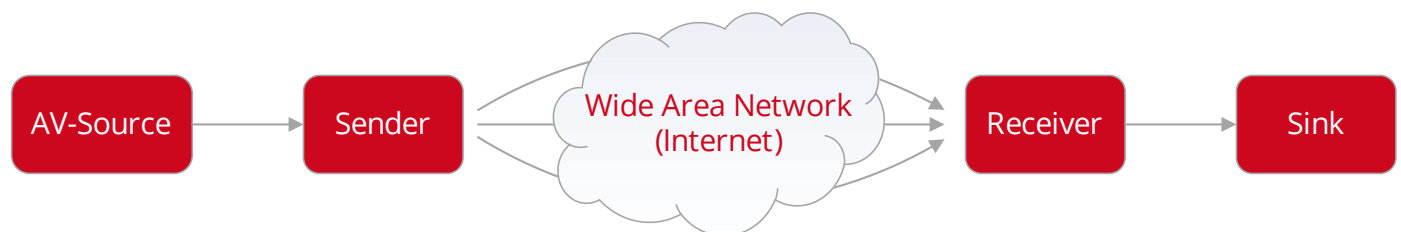
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System Characteristics

- Tight MediorNet Integration
- High Quality H.264 Decoding of SD and HD-Signals in 4:2:0 8 Bit or 4:2:2 8 Bit/10 Bit
- Decoding bitrate up to 40 MBit/s
- End to end latency below 1 sec
- Compact 1RU design for rackmount and standalone applications

Signal Inputs and Outputs

- SD/HD Analog and Digital Audio/Video Outputs
- up to 8 Channels of Audio Transmission per Video-Signal
- Genlock Input

Remote Control

- Flexible control, choose between:
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Technical Specifications

Version	MN-H264-D-Basic	MN-H264-D-Plus	MN-H264-D-Quad
Form Factor	19", 1RU		
Power Supply	100 ... 240 VAC, redundant		

Decoding			
Codec	H.264		
Color Depth Compatibility	8 Bit + 10 Bit		
Color Subsampling Compatibility	4:2:0 + 4:2:2		
Decoding Bitrate Comaptibility	1 ... 40 MBit/s		
Signal Processing	Framerate and Resolution Conversion		
Number of parallel decoded Streams	1	1	4

Supported Formats	
SD	625/25 PAL, 525/29.97 NTSC, 525/23.98 NTSC.
HD	720p50, 720p59.94, 720p60, 1080PsF23.98, 1080p23.98, 1080PsF24, 1080p24, 1080PsF25, 1080p25, 1080PsF29.97, 1080p29.97, 1080PsF30, 1080p30, 1080i50, 1080i59.94 and 1080i60

Connections			
SDI connection	1x SD-SDI (SMPTE 259M) and HD-SDI (SMPTE 292M)		4 Independent SD-SDI (SMPTE 259M) and HD-SDI (SMPTE 292M)
HDMI connection	SD and HD, 1 x HDMI type A connector		n/a
Genlock	n/a	Blackburst in SD, 720p50, 720p59.94, 1080i50 and 1080i59.94 formats or Tri-Sync in any HD format	
SDI Embedded Audio	8 Channels in SD and HD		
Analog Video	n/a	1 x Component video on 3 BNCs, 1 x S-Video on S-Video connector, 1 x Composite NTSC/PAL on 1 BNC	n/a
AES Audio	n/a	2 Channels unbalanced with sample rate converter	n/a
Analog Audio	n/a	4 Channels of professional balanced analog audio via 1/4" jack connectors	n/a