

12G-SDI / 4K-UHD HDMI H.264/ H.265 Streamer and Recorder

- Support for SDI video input up to 12Gbit/s
- Support for HDMI video input up to WQXGA
- H.264 and H.265 encoding
- Supported streaming formats
 - RTMP & RTMPS
 - RTP/RTSP
 - TS over UDP or RTP
 - HLS (HTTP Live)
 - SRT Listener/Caller/Rendezvous
- Unicast or Multicast
- Stream and record at the same time; record to USB 3.0
- Logo Insertion and Custom Image if input missing
- Resizable and freely positionable text overlays
- Mobile friendly Web UI for configuration
- Device status information and configuration of IP network settings via USB in LynxCentral

The PEC 1464 is a versatile, compact SDI/HDMI H.264/H.265 streamer and recorder designed for a wide range of applications in the broadcast, film and pro AV industry. The module can be configured to stream, record or to do both simultaneously.

Two channels of audio are deembedded from the video input. In addition, the PEC 1464 has a line audio input and either one of these audio sources can be used for the streamer and/or recorder.

Users can insert a logo into the video signal stream, which can be positioned freely. Also a custom image can be shown if the input is missing. It supports resizable and freely positionable text overlays.

The PEC 1464 supports a wide range of streaming standards as well as unicast and multicast operations. Whether you are streaming live to a Content Delivery Network using RTMPS, viewing the stream on one or more computers using RTP/RTSP unicast or multicast, or streaming to a dedicated decoder or multicast address using TS over UDP or RTP, the PEC 1464 is a powerful device ideal for a diverse set of applications.

The PEC 1464 is suitable for live event streaming, webcasts, corporate or enterprise streaming, presentation and conferencing, AV system monitoring, house of worship proceedings streaming and many more.

A mobile device friendly Web UI allows for a simple configuration from a PC, Mac, tablet or smartphone.

Note: For legal reasons, HDMI capture devices from LYNX Technik AG are designed not to capture, convert or transmit video or audio from HDCP copy-protected sources (e.g. Satellite receivers, Cable receivers, etc.)



Technical Specifications

Video Inputs	1 x 75 Ohm BNC SDI input; 1 x HDMI 2.0b, Type A connector												
Video Formats	<table border="0"> <tr> <td>SMPTE 2082 (12G UHD)</td> <td>• 3840 x 2160p 50/59.94/60</td> </tr> <tr> <td>SMPTE 2081 (6G UHD)</td> <td>• 3840 x 2160p 25/29.97/30</td> </tr> <tr> <td>SMPTE 424M (3G HDTV)</td> <td>• 1920 x 1080p 50/59.94/60</td> </tr> <tr> <td>SMPTE 292M (1.5G HDTV)</td> <td>• 1920 x 1080p 25/29/30</td> </tr> <tr> <td></td> <td>• 1920 x 1080i 50/59.94/60</td> </tr> <tr> <td></td> <td>• 1280 x 720p 50/59.94/60</td> </tr> </table>	SMPTE 2082 (12G UHD)	• 3840 x 2160p 50/59.94/60	SMPTE 2081 (6G UHD)	• 3840 x 2160p 25/29.97/30	SMPTE 424M (3G HDTV)	• 1920 x 1080p 50/59.94/60	SMPTE 292M (1.5G HDTV)	• 1920 x 1080p 25/29/30		• 1920 x 1080i 50/59.94/60		• 1280 x 720p 50/59.94/60
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Video Encoder	H.265 according to MPEG-H AVC Part 2: <ul style="list-style-type: none"> • Main, Main 10, Main 4:2:2, Main 4:4:1 10bit • Level 5.1 4:2:0/4:2:2 H.264 according to MPEG-4 AVC Part 10: <ul style="list-style-type: none"> • Baseline, Main, High, High 10, High 4:2:2 												
Video Processing	<ul style="list-style-type: none"> • Downscaling • Frame Rate Down Conversion • Text Overlay • Logo Inserter (JPEG RGB, PNG24, PNG8, TIFF, static GIF, BMP) • Transmission Fallback Option: Test Pattern 												
Audio I/O	<ul style="list-style-type: none"> • Input: 8 Channel embedded SDI Audio Input • Unbalanced analog line audio input - 3.5mm jack - Stereo • Output: Streaming Protocol dependant: <ul style="list-style-type: none"> - RTMP, RTMPS: 1 Stereo Channel - TS-UDP, TS-RTP, HLS, SRT, RTSP: 4 Stereo Channels 												
Audio Processing	<ul style="list-style-type: none"> • Processing Options: Channel Mapping, Gain, Mute, Sample Rate, Bitrate • Audio Loss Reply Fallback Option: Mute, Testtone 												
Protocols	<table border="0"> <tr> <td>• TS over UDP, RTP</td> <td>• HLS</td> </tr> <tr> <td>• RTP/RTSP</td> <td>• SRT Listener, Caller, and Rendezvous</td> </tr> <tr> <td>• RTMP/RTMPS</td> <td></td> </tr> </table>	• TS over UDP, RTP	• HLS	• RTP/RTSP	• SRT Listener, Caller, and Rendezvous	• RTMP/RTMPS							
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Recording	1x USB 3.0 Female Type "A" Connector (Supported formatting: FAT32, exFAT, vFAT, Ext2, Ext3, Ext4) Output Container: .mp4, .ts, .mov (Max. recoding time for .mov and .mp4: 4 hours)												
Network	10/100/1000 Ethernet (RJ-45)												
Power	+12VDC @ 8W (excl. SFP) nominal - (supports 10 - 24VDC input range)												
Physical	Size: 124mm x 90mm x 50mm (4.88" x 3.54" x 1.9685") incl. connectors Weight: 230g (8.11oz)												
Ambient	0 - 45 °C (32 - 113 °F) 90% Humidity (non condensing)												
Model #	PEC 1464 - (EAN# 4250479329492)												
Includes	Module, AC power supply, mini USB cable, Ethernet cable												



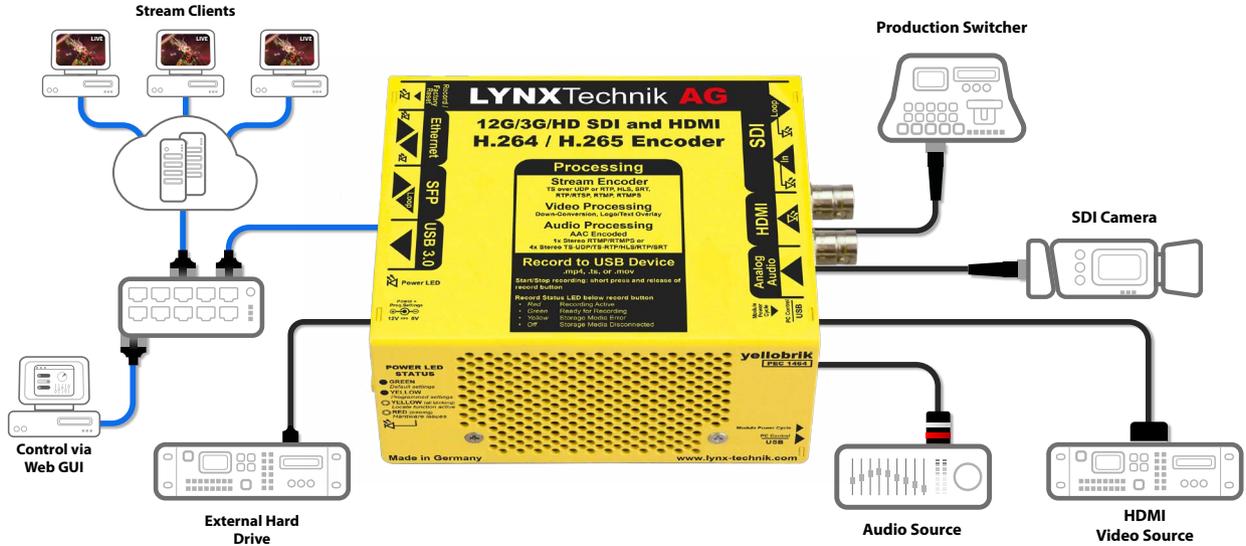
CAUTION: This is a high power module. If mounting the module in the RFR 1200 rack frame please leave an empty slot each side of the module to allow for adequate airflow to prevent the risk of overheating.

PEC1464_DS_rev02 Specifications subject to change



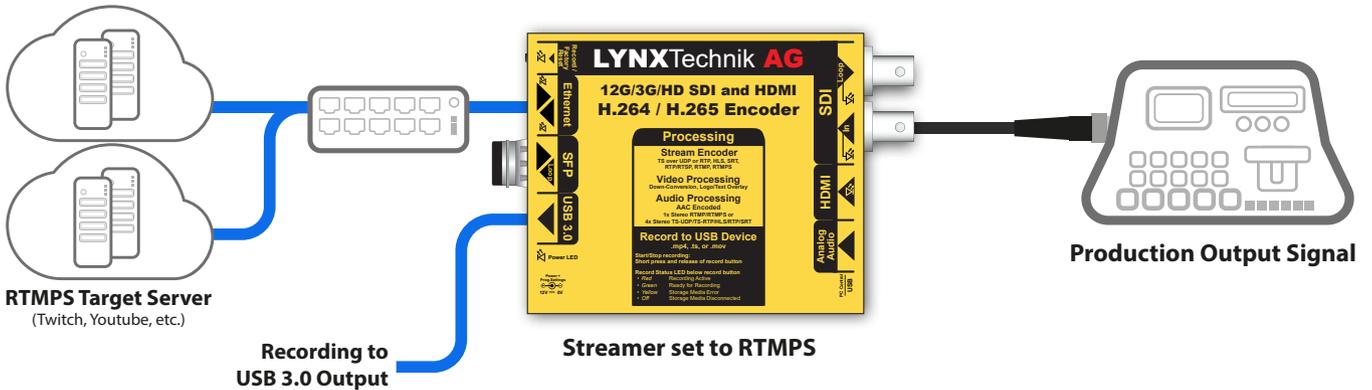
Application Example: Streaming and Archiving in 12G-SDI & 4K UHD

The PEC 1464 can stream and record footage simultaneously to an external hard drive. Switchover if SDI and/or HDMI input drops is also possible. Writing to an external hard drive requires at least USB 2.0 for 3G footage. Writing 4K footage to a hard drive is only possible with USB 3.0.

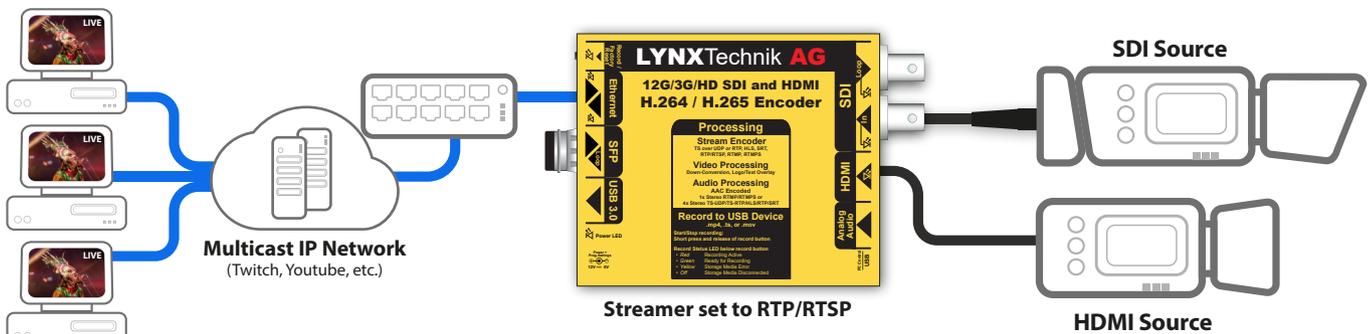


Application Examples

Stream live to a Content Delivery Network (CDN) and make a backup recording at the same time



Multicast a video feed into a network



Functional Diagram

