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PEC 1464

LYNX | Centraal™ ✓ yelloGUI ✓

12G-SDI & HDMI H.265 Streamer Recorder

- HDMI and 12G-SDI UHD video input
- Analog Audio Input
- 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
- Record to USB 3.0
- Realtime Logo Insertion
- Custom Image and Test Pattern Transmision fallback
- Advanced Text Overlays
- Mobile friendly Web UI for configuration
- IP network Status and Configuration via LynxCentraal over USB



The PEC 1464 is a versatile, compact 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 take a 12G-SDI or HDMI source then stream and record it simultaneously.

Two channels of audio are de-embedded 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.

Support for real time logo insertion and advanced text overlays on the video signal with control over size and text position. A custom image or color bars can be displayed when the video input is lost or missing (transmission fallback).

The PEC 1464 supports a wide range of streaming standards as well as unicast and multicast operations. A mobile friendly Web UI allows for a simple configuration from a PC, Mac, tablet or smartphone.

The PEC 1464 is compatible with yelloGUI and LynxCentraal for remote configuration and status monitoring.

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.)

Fiber I/O Options:

Model	Description		
12G-SDI Fiber Transceiver SFPs		Power	Sense
OH-TR-12G-LC	SFP Fiber RX/TX - Singlemode, LC Connector, 10km	-2.5 dBm	-10 dBm
OH-TR-12G-XXXX-LC	12G CWDM Fiber RX/TX - Singlemode LC Conn., 40km XXXX=Wavelength. 18 according to ITU T G692.2 (1270 - 1610nm)	+0.5 dBm	-10 dBm
12G-SDI Fiber Receiver SFPs		Sensitivity	
OH-RX-12G-LC	Simplex Fiber Receiver - LC Connector. Single-mode Standard 1310nm and CWDM	-10dBm	
OH-RX-12G-ST	Simplex Fiber Receiver - ST Connector. Single-mode Standard 1310nm	-10dBm	
OH-RX-4-12G-LC	Simplex Fiber Receiver, High Sensitivity, LC Connector. Single-mode Standard 1310nm and CWDM	-18dBm	

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

Technical Specifications

Video Inputs	1x 75 Ohm BNC SDI input; 1x HDMI 2.0b, Type A connector			
Video Formats	SDI	**12G -SDI** (SMPTE 2082)	3840 x 2160p	50 / 59.94 / 60
	SDI	**6G-SDI** (SMPTE 2081)	3840 x 2160p	25 / 29.97 / 30
	SDI	**3G-SDI** (SMPTE 424M)	1920 x 1080p	50 / 59.94 / 60
	SDI	**1.5G-SDI** (SMPTE 292M)	1920 x 1080p 1920 x 1080i 1280 x 720p	25 / 29.97 / 30 50 / 59.94 / 60 50 / 59.94 / 60
	HDMI	**UHD**	3840 x 2160p	25 / 29.97 / 30 / 50 / 59.94 / 60
	HDMI	**HD**	1920 x 1080p 1920 x 1080i 1280 x 720p	25 / 29.94 / 30 / 50 / 59.94 / 60 50 / 59.94 / 60 50 / 59.94 / 60
Color Precision	YCbCr 4:2:2 10-bit			
Video Encoder	H.265 according to MPEG-H Part 2 (HEVC): • Main, Main 10, Main 4:2:2 H.264 according to MPEG-4 Part 10 (AVC): • Baseline, Main, High, High 10, High 4:2:2			
Video Processing	• Downscaling • Frame Rate Down Conversion • Text Overlay • Logo Inserter (JPEG RGB, PNG24, PNG8, TIFF, static GIF, BMP) • Transmission Fallback Option: Test Pattern or Custom Image (png, jpeg)			
Audio I/O	• **Input:** 8 Channel embedded SDI Audio Input • Unbalanced analog line audio input - 3.5mm stereo jack • **Output:** Streaming Protocol dependent: - RTMP , RTMPS: 1 Stereo Channel - TS-UDP , TS-RTP , HLS , SRT, RTSP: 4 Stereo Channels			
Audio Processing	• Processing Options: Channel Mapping, Gain, Mute, Sample Rate, Bitrate • Audio Loss Reply Fallback Option: Mute, Test-Tone			
Protocols	• TS over UDP, RTP • RTP/RTSP • RTMP/RTMPS • HLS • SRT Listener, Caller, and Rendezvous			
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	+12V DC @ 16W (supports 10 to 24V DC 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			

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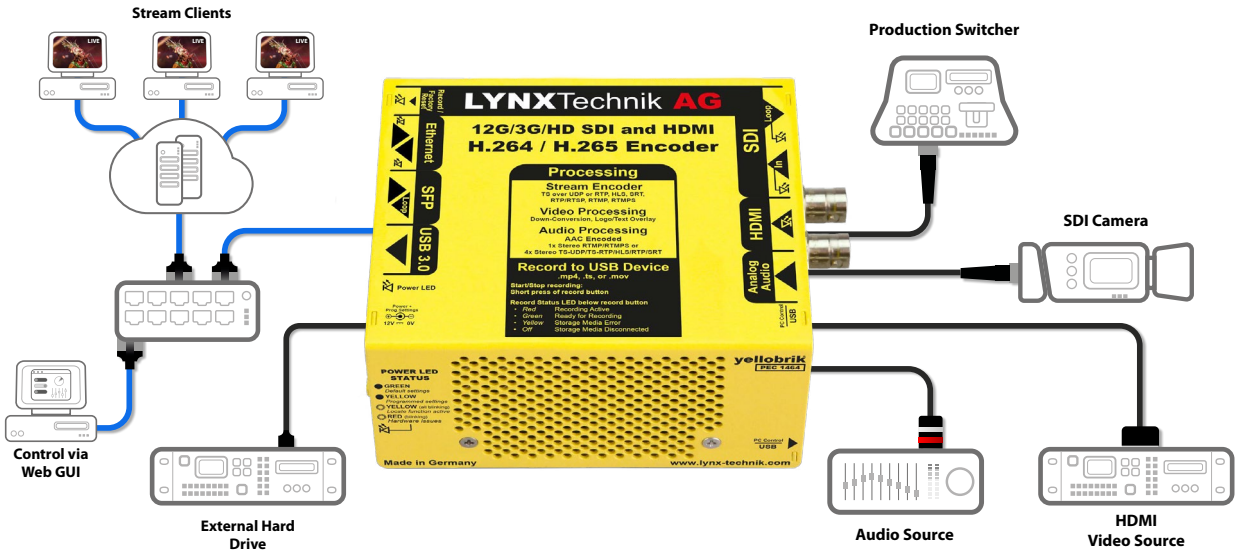
Application Example: Streaming and Archiving

The PEC 1464 can stream and record footage simultaneously to an external hard drive. Writing to an external hard drive requires at least USB 2.0 for HD footage, USB 3.0 for UHD footage.

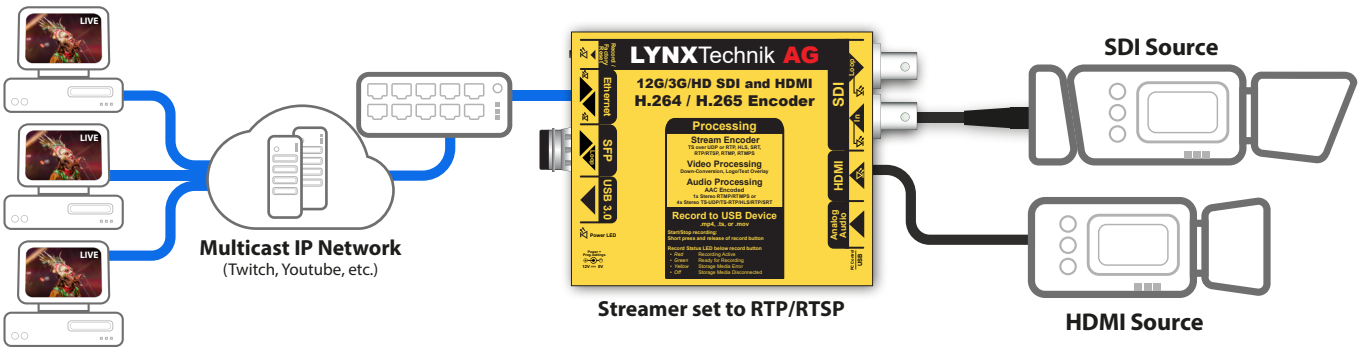


Application Examples

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

