

C22-OG

H.264 encoder/decoder

PESA's XSTREAM C22-OG is a highly versatile, dual channel H.264 encoder/decoder device for high definition video processing, audio processing and IP streaming. Each processing channel is totally independent from the other and can function as a remote client for decoding an H.264 IP stream or an encoder to webcast an IP output stream from a variety of input signal sources.

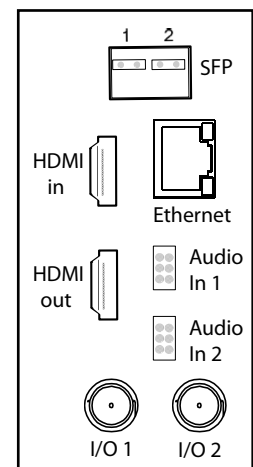
Each processing channel offers video and audio input and output interface in various signal formats at resolutions up to 1080p/60, through rear panel connectors. The C22-OG also accepts input from the host openGear frame sync reference that allows local output video signals to be sync locked for use in broadcast and other high-end video environments.

An independent audio mixer function is provided for each encoder and decoder that allows the audio associated with the input or output video source to be blended or replaced with a source of local auxiliary audio. All audio processing is dual channel for full L/R stereo or other applications.

The C22-OG complies with openGear standards for size, form-factor and power consumption. It occupies 2 slots in the openGear 3 frame which means that a single frame can host 20 channels of encode, decode or an arbitrary mix.

Key Features

- Support RTP/RTSP and RTMP protocols
- Inputs video and audio signals from a variety of signal formats and sources
- Two processing channels for video and audio
- Configured each channel independently as streaming encoder and decoder
- SFP cage offers additional input output options
- Mixing functions to create custom audio track for each video signal
- Two simultaneous and independent IP output streams
- Single Unicast, Multiple Unicast or Multicast streaming
- HDMI input and output
- RJ-45 for Gig-E network connections
- High resolution and bitrate support- up to 1080p60 and 10Mb/s



Rear Panel Connections

SPECIFICATIONS

VIDEO INPUTS

HDMI	
Number	1, HDMI or DVI, can be used with either processing channel
Resolution	720p, 1080p
HDCP Support	No
BNC	
Direction	Input or Output, software configurable
Number	2 BNC connectors
Type	Standard 75 Ohm
Formats	SMPTE ST-292 (720p, 1080i), ST-424 (1080p)
Return Loss	≥15dB 1MHz to 1.5GHz; ≥10dB, 1.5GHz to 3GHz.
Equalization	200m auto-equalization Belden 1694A or equivalent at 1.5Gbps; 140m auto-equalization Belden 1694A or equivalent at 3.0Gbps

SFP

Direction	Input or Output, software configurable
Number	Varies, depending on SFP module used
Formats	Varies, depending on SFP module used

IP Video

Connection	RTP/RTSP
Format	H.264 (MPEG 4/Part 10)
Connector	RJ-45 for 100/1000 Gig-E port
Supported IP Cameras:	Axis M1054 Axis M1114 Generic RTSP
	Support for additional IP cameras is being added on a regular basis. Contact PESA if the specific camera you are using is not listed, or attempt data capture using the Generic RTSP Capture capability of the C22.

AUDIO INPUTS

Source	
	- Analog audio, line/mic level, 2 channels
	- De-embedded from SDI video input, up to 2 available sources
	- AAC audio decoded from IP stream associated with IP video input signal, up to 4 available sources
	- Test tone, internally generated
Number	
	2 Audio processing channels, stereo
Analog Audio	
Format	Balanced or unbalanced input (output is unbalanced only)
Audio Level	Mic level with user selectable "phantom power" or line level inputs
Gain Adjustment	+12dB to -40dB line level/+59dB to 0 dB mic level

IP STREAMING

Number	2 Individually addressable IP streams; each containing video from either the decoder output or the local video input of its' processing channel, plus the audio signal associated with the video input
Streaming Mode	Single unicast, multiple unicast or multicast – independently selectable for each stream
Connection	RTP/RTSP or RTMP
Format	Video: H.264 (MPEG 4/Part 10), Audio: AAC
Video Resolution	1080i, 720p/1080p - 25, 29.97, 30, 50, 59.94, 60 fps
Streaming Rates	(selectable) 0.5Mb, 0.75Mb, 1Mb, 2Mb, 4Mb, 6Mb, 8Mb, 10Mb
Connector	RJ-45 for 100/1000 Gig-E Ethernet port

VIDEO OUTPUTS

HDMI	
Number	1 Selected from either video processing channel, plus audio signal associated with selected video source
Resolution	720p, 60fps, 1080p, 60fps
SDI	
Number	Up to 2, One SDI output may be software configured to bi-directional BNC for each processing channel – if the BNC is not used as a video input port for the channel One additional SDI output for each processing channel may be added through SFP outputs, with proper SFP module installed in rear panel cage
SFP	
Direction	Input or Output, software configurable
Number	Varies, depending on SFP module used
Formats	Varies, depending on SFP module used

AUDIO OUTPUTS

Analog	
Number	2 Audio Channels, unbalanced, line level

NETWORK and MECHANICAL

NETWORK	
Number	1 RJ-45
Type	Gig-E (100/1000) Ethernet
Control	Ethernet, browser based user interface
Network Control	Supports PESA Catrxxx management control software or openGear DashBoard
MECHANICAL	
Mechanical	2.825 in H X 12.79 in L 71.755 mm X 324.866 mm

Network Input

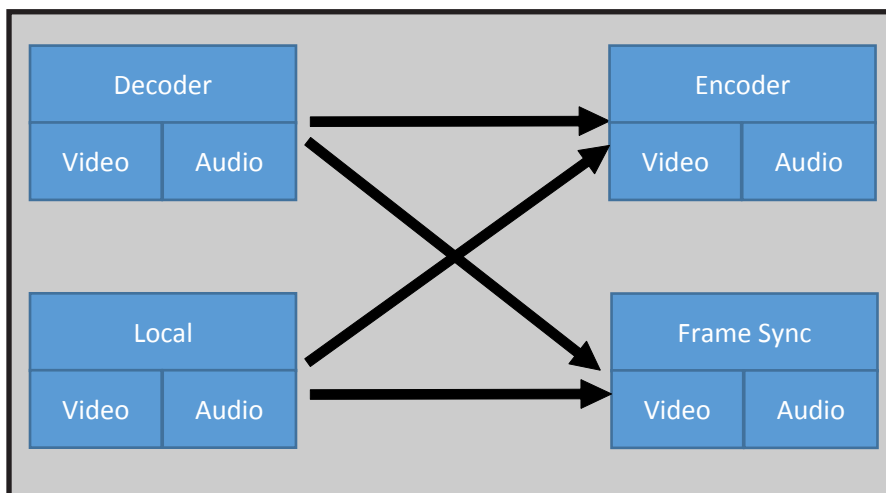
Source

- IP Camera
- RTSP stream

Local Input

Source

- BNC Coax
- SFP
- HDMI
- Test Pattern



Network Output

- RTSP stream
- RTMP stream

Local Output

- BNC coax
- HDMI
- SFP



ORDERING INFORMATION

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Warranty:

Products manufactured by PESA are manufactured for performance and reliability. PESA warrants these products against defects and workmanship for a period of three years.

Services:

Customer support is available 24 hours a day, 7 days a week by calling 1-800-323-7372.

International customers call
+1 (256) 726-9222.

In addition to our customer service support center, we offer extended warranties and online technical resources via our website at: **www.pesa.com**

On site or online training is available for control system operations, technical, and maintenance training. Contact our technical support group for additional information.

Specifications subject to change without notice.