

 noisypeak

the **apex** of video over ip solutions

noisypeak blade

Ultra-high density modular hardware accelerated HEVC, H.264 and MPEG2 encoder

performance (multibitrate)

Up to 80 **HD HEVC**
Up to 162 **HD**
Up to 324 **SD**

technology

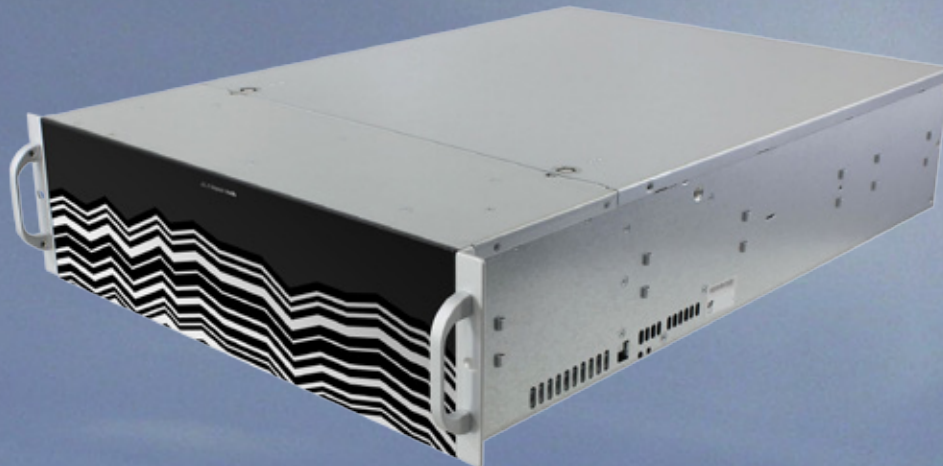
Up to 14 Hot-plug blades
Up to 28 Intel® Xeon® E3-1275v5 processors (8MB Cache, 3.6Ghz, Intel Graphics P530)
Up to 2x GbE switches with 2x 40Gb/s QSFP or 8x 10Gb/s SFP+ uplinks
Up to 4x (N+1 or N+N redundant) 2000W PSU
Form Factor: 3U

advanced video encoding for IPTV/OTT

ABR: HLS, DASH, MSS, RTMP, SPTS/MPTS/MBTS
DRM: Google® DRM, Microsoft® Playready®, Verimatrix®, Nagra® PRM
Audio: HE-AAC, AAC-LC, Multichannel pass-through
Redundancy: 1+1, 1+n, 1+m



based on
noisypeak uniform encoding engine



specs

Model	noisypeak blade
Control plane (1 blade)	
CPU	2 X Intel® Xeon® Processor E5-2630 v3 (20M Cache, 2.40 GHz)
RAM	32GB
SSD	2 X 80GB
Blade modules	
Total	Up to 13
CPU	2 X Intel® E3-1275 v5
GPU	P530
RAM	2 X 8GB
Chassis	
Formfactor	3U
PSU	Up to 4x (N+1 or N+N redundant) 2000W
NICs	Up to 2x GbE switches with 2x 40Gb/s QSFP or 8x 10Gb/s SFP+ uplinks

noisypeak encoders at a glance

- High performance multi-GPU hardware acceleration for MPEG2, H.264 and HEVC
- Up to 28 CPU/GPU's
- Input: multicast/TS, SDI/HD-SDI, HDMI, IP, UVC 1.5
- Output: multicast SPTS/MPTS, HLS, MPEG-DASH, Smooth Streaming, RTMP
- HLS on input for bridging
- Multi-device management up to 50 encoders (additional software)
- Direct publishing to CDNs, build in WebDAV server and client
- DRM content protection: Google® DRM/CENC, PlayReady, Verimatrix®, Nagra®
- More than 40 JSON API methods for integration
- Clustering services for high-availability systems: n+1, 1+1, n+m (additional software)

intuitive GUI

for Web-management (channels, templates, adaptive bitrate configuration, DRMs, publishing, etc.)



encoding module

a future-proof investment with capability to upgrade to new Intel CPU/GPUs as they become available.



Fully modular chassis with 14 hot-swap encoding modules

NPMV1

Encoding module for NP Blade.
Two Intel E3-1200v5 series CPUs
with P530 GPU for high-volume
video processing



Encoding statistics

310/310 310/310 1240/1240 7:09:33

Input channels Output channels Output streams Uptime (d:h:m)

+ Log

Channels

ID	Channel	Source	SID	V-PID	A-PID	State
+ Add New Channel						
65	Backup test	udp://239.33.2.1:1234 udp://239.33.0.25:1234 (B)	auto	auto	auto	stopped
64	TVN	file://live://E-0in ts 0	4	202	203,204	started
63	Telecate	udp://239.255.3.97:1234	268	auto	auto	processing
61	Sport	udp://239.33.0.61:1234	auto	auto	auto	processing
60	Viasat Sport	udp://239.33.0.27:1234	auto	auto	auto	processing
59	Viasat History	udp://239.33.0.25:1234	auto	auto	auto	processing

noisypeak blade encoder feature set

input

RTP/UDP SPTS/MPTS
TS files- file2live, file2vod
HLS
SDI/HD-SDI, HDMI through Magwell®, Blackmagic®
add on modules
SDP/Onvif for IP security cams
Dynamic input adjustment for codec and protocols
Audio AAC/AAC LATM, MP2/3, AC3, EAC3

output

UDP unicast/multicast SPTS, MBTS/SPTS, MPTS
MPEG-DASH Live and VOD
HLS - v2 or v4 with multi-language support
Microsoft® SmoothStreaming
RTMP
TS and MP4 files
WebDAV or Windows® share (Samba)
Multi format simultaneous publishing
DVB PID passthrough
Closed captions - CEA-708, EIA-608, WebVTT

DRM

Nagra® PRM
Microsoft® Playready
Verimatrix®
Google® DRM for MPEG-DASH/CENC
AES128 static key

management

Management of up to 50 encoders in uniform Web interface
Touch-screen local management for noisypeak one

high-availability

Redundancy management system that support:
n+1, n+m, 1+1
Input source redundancy in standard image
Publishing server redundancy

video encoding

Up to 4K video processing
MPEG2, H.264, HEVC
Static Images preview generation
Logotype, texts string overlays
Baseline, Main and High profiles
CABAC/CABVLC
Picture in Picture up to 4 streams
Framerates: fixed to source framerate
Linear time-code generation
Single input to multi-stream output
Look ahead buffer
NAL HRD conformance parameters:
a. HRD buffer length
b. HRD initial delay
GOP structure adjustment:
a. frame-accurate closed GOP length
b. B-frames count
c. re-frames count
d. IDR interval
e. Slice count
h.264 AVCC/Annex B at the input
h.264 Annex B for multicast/hls output
h.264 AVCC for RTMP output
Video post-processing:
a. Scaling
b. Cropping
c. Deinterlacing
d. Letterboxing

audio encoding

Support of multi audio channels
MP2/MP3
AAC-LC/HE
Gain control
Sample rate transform
Audio leveling

front-panel

Power On/Off button
Power LED
2x USB 2.0 ports

chassis size

Form Factor: 3U / (H x W x D):
5.215" x 17.67" x 36.10"
(132.5mm x 449mm x 917mm)

power requirements

Up to 4 hot-swap High-efficiency
1600W, N+1 or N+N redundant power
supplies

typical encoding profiles

HD (HEVC)		
#	Bitrate	Resolution
1	4500	1920x1080
2	2500	1280x720
3	1500	1024x576

HD		
#	Bitrate	Resolution
1	6000	1920x1080
2	4500	1280x720
3	2500	1024x576

SD		
#	Bitrate	Resolution
1	1600	720x404
2	1100	640x360
3	700	480x270
4	400	312x176
5	200	248x140



Contacts

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