nCENTRIC

HEVC Encoder

The HEVC encoder will automatically convert any analog or digital video stream into a compressed IP stream, and transmit it over a constrained VSAT link at minimal bandwidth while maximizing the video quality. The videostreams are transcoded and broadcast worldwide from our datacenter and can be accessed through a secure web portal on any device.

HEVC encoding

nCentric's HEVC encoder is purposely built for backhauling live video streams from remote locations to anywhere in the world. State of the art algorithms offer a compression ratio twice as efficient as the industry standard H.264/AVC, requiring only half the bandwidth of traditional encoders to achieve equal quality, and effectively reducing video streaming bandwidth costs by 50%. Alternatively, project managers can choose to double image quality at the same bandwidth and therefore improve customer satisfaction.

Integrated with nCentric's streaming platform

The HEVC encoder pushes a unicast stream over the VSAT to our secure datacenter. Once ingested, the stream is transcoded and piped through to our worldwide distribution platform. End users can access the live video feed anywhere in the world with any device.

Easy management and configuration

Traditionally, video encoders have always been complicated to manage and configure: they require port forwarding or public IP mappings to be set up with your VSAT provider. nCentric's solution will create a secure tunnel over any kind of internet connection without any additional actions required. Setting up an IP address and selecting which video input to broadcast can easily be done through the intuitive web interface, or with a touch screen on the device. Streaming bitrate, resolution, encoding parameters, etc. are all determined automatically and continuously adjusted to deliver the highest quality over a constrained link.

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GENERAL

Unit type
19" 1U rack unit

Stream-to-shore
Single HEVC feed

Digital video input
HDMI

Analog video input
Component, Composite or S-Video

Encoding
HEVC/H.265

Management
Web UI with live video player

VIDEO FORMAT SUPPORT & STANDARDS

Automatic input format detection

SD format support
» 625i/50 PAL
» 525i/59.94 NTSC
» 480p

HD format support
» 720p50, 720p59.94, 720p60
» 1080i50, 1080i59.94, 1080i60
» 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p6

Ultra HD format support (on request)
» 2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30

HDMI video sampling
» RGB 4:4:4 in HD
» YUV 4:2:2 in Ultra HD

HDMI Color Precision
» 10-bit

Color space
» REC 601
» REC 709

Copy protection
HDMI input is unable to capture from copy protected HDMI sources. Always confirm copyright ownership before capture or distribution of content

VIDEO PROCESSING

Deinterlacing

Down scaling

NETWORKING

Unicast/Multicast

Monitoring with SNMP, ICMP

Management over HTTP/HTTPS/SSH/OVPN

DHCP Client / Static IP

SECURITY

Web interface passwords SHA1

OpenVPN tunneling on all external communication

INTERFACES

Ethernet
two GbE RJ45

Digital video
one HDMI type A

Analog video
one BNC input for composite video
one combined input connector for component & s-video

USB 3.0
two type-A host port (debug)

VGA
one D-sub25 (debug)

Power
IEC 60320-1 C14 inlet

PHYSICAL AND ELECTRICAL

Size
17.2 in (437 mm) x 9.8 in (249 mm) x 1.7 in (43 mm)

Weight
11.46 lbs (5.2 kg)

Typical power consumption
200 Watt

Power supply
100 - 240V, 50-60Hz, 2.6A max

ENVIROMENTAL

Operating temperature
32F (5°C) to 104F (40°C)

Storage temperature
-4F (-20°C) to 113F (45°C)

Operating humidity
8% to 90% non-condensing

STANDARDS COMPLIANCE

Safety and EMC
USA - UL listed, FCC
Canada - CUL listed
CCC Certification
EN 60950/IEC 60950-Compliant
Europe/CE Mark
Germany - TUV Certified

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