

HERA 4000u

USER GENERATED CONTENT MEDIA TRANSCODER

WIDE STANDARDS SUPPORT FOR HIGH SPEED CONTENT ADAPTATION FOR VIDEO-ON-DEMAND SERVICES FOR WEB AND MOBILE TV

- > On Demand Transcoding
- > Content Re-Purposing (Mobile & Web)
- > Cropping / Scaling / Auto Letterbox Detection
- > Metadata handling: Extraction, Insertion

The HERA 4000u video transcoding appliance is specifically developed for delivery of User Generated Content (UGC) to web and mobile devices. In recent years there has been an explosion in the amount of personal video content being generated and distributed. The types of content and endpoint capabilities continue to change and evolve on a daily basis. The HERA 4000u smartly adapts to this ever changing environment to deliver superior quality video at low bit rates for any device.

HIGHLIGHTS

- > Superior video quality tailored to lower resolution endpoints
- > Up to 15x performance improvement compared to x86-based solutions
- > Wide standards support: MPEG-2, MPEG-4, H.264, DivX, xVID, Quick-Time, Flash 9, WM9, 3GPP
- > Multi-codec, multi-file input/output
- > Metadata handling: Extraction, Insertion
- > A/V Truncation, Audio Extraction, Quality Reporting
- > Fully automated workflow management
- > Remote management, monitoring and upgradability
- > Fully redundant, auto-failover
- > Cost effective



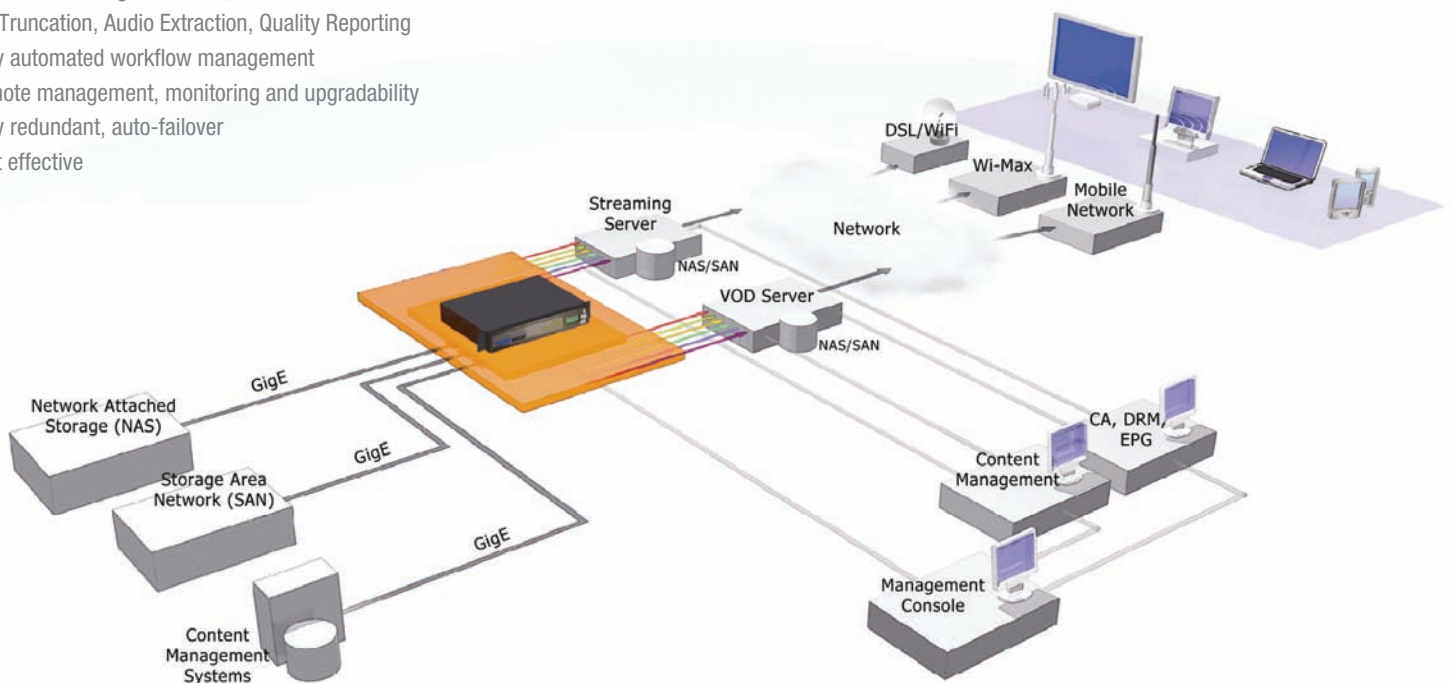
2008

FROST & SULLIVAN

World Video Encoders & Transcoders Market
Product Innovation Award

APPLICATIONS

- > Content Adaptation for Video-On-Demand Services in Web and Mobile TV
- > Digital Media Repurposing for Portable Media Players
- > Digital Libraries and Asset Management Systems Migration
- > User-Generated Content Adaptation
- > Time-sensitive Transcoding Tasks Acceleration



HERA 4000u

TECHNICAL SPECIFICATIONS

Inputs:

Interfaces	Gigabit Ethernet
Storage Systems	Network Attached Storage (NAS) Storage Area Networks (SAN) Content Management Systems
Media Format	MPEG-2 MP/HP (SD/HD) H.264/AVC (ISO/IEC 14496-10) 3GPP (ISO/IEC 14496-14:2003) MPEG-2 TS/PS (ISO/IEC 13818-1, ISO/IEC 11172-1) MPEG-4 - mp4 format (ISO/IEC 14496-1) AVI, VOB, Apple QuickTime Movie VC-1, Window Media 9 DivX, Xvid MPEG-1 Audio Layers I, II AC-3 Audio (pass-through) MPEG-4 ISO/IEC 14496-3 GA (General Audio) AAC/AAC-HE - Advanced Audio Coding (MPEG2, MPEG4) AIFF / WAV

Outputs:

Media Format	H.264/AVC (ISO/IEC 14496-10) 3GPP (ISO/IEC 14496-14:2003) MPEG-4 - mp4 format (ISO/IEC 14496-1) Flash 9 VC-1, Window Media 9 MPEG-4 ISO/IEC 14496-3 GA (General Audio) AAC LC/HE (Advance Audio Coding), MPEG2 and MPEG4 Adaptive Multi-Rate - AMR (3GPP TS 26.071) AIFF / WAV
--------------	--

Transcoding Features:

Video	Bit Rates: 16 – 4096 Kbps Frame Rates: 1 – 60 Hz Resolutions: SQVGA (160x120), QCIF (176x144), QVGA (320x240), SIF/CIF (352x240/288), VGA (640/x480) or custom size Bit Rate Control: CBR, VBR, Adaptive Configurable motion search range Multiple reference frames with quarter-pel search Enhanced scene-change detection logic De-blocking & noise reduction filters Aspect ratio conversion, Interlace/de-interlace Scaling, Cropping
Audio	ADTS header format, LATM packetization Bit Rates: 8 – 288 Kbps Sampling Rates: 8, 11, 16, 22, 32, 44.1, 48 KHz Bit Rate Control: Constant and Variable bit rate control
Tools	Metadata preservation, insertion, extraction Audio extraction Analog & digital closed captioning extraction WC3 TT, SCC, SAMI Proxy file generation Quality Control Reporting PacketVideo, Apple/Darwin, Flash Media Server support

System Configuration:

Management & Automation	SNMP v.2 alerts / traps / remote control Web Management Console Auto-failover XML-based profiles SDK for integration with custom applications SOAP layer Watch folder automation FTP integration CMS integration hooks
Form Factor	Rack, Steel chassis 1U (44mm)H, 19" (482.6mm)W, 18.5" (470mm)D Weight: 15.4 lbs (7Kg)
Transcoding Module	Max two
LCD Panel	2 x 16 character LCD control panel with backlight 6 keys mini keyboard
I/O Connectors	2 x Gigabit Ethernet
Power supply	AC: 90-264V / 47- 63Hz, 350W, auto-switching
Cooling system	Chassis: 2 x 40x40 mm fans CPU: 1 x 60x60 mm fan Power Supply: 1 x 40x40 mm fan
Environmental	Operating Temperature: 0 to 50° C, 32 to 122° F Storage Temperature: -20 to 65° C, -5 to 150° F Humidity: 5 to 90 % Shock: 10G / 11ms in all axis Vibration: 0.8G / 5 to 100 Hz
Electromagnetic Compatibility	FCC Class A, CE compliance, UE 89/336/EEC EN61000-6-2, EN55022, EN55024
Safety Approval	UE 73/23/EEC EN60950: 2000

Available Configurations

- HERA 4010u:** includes 1 transcoder module
- HERA 4020u:** includes 2 transcoder modules

Sample Transcoder Task

Bitrate <i>kbps</i>	Frame <i>WxH, pxls</i>	Rate <i>fps</i>	Codec <i>video</i>	Codec <i>audio</i>	Container	Speed <i>x real-time</i>
------------------------	---------------------------	--------------------	-----------------------	-----------------------	-----------	-----------------------------

Source:

6000	720x480	29.97	MPEG2	MP2	VOB
------	---------	-------	-------	-----	-----

Output:

1200	640x480	29.97	H.264	AAC	MP4	12x
384	320x240	29.97	H.264	AAC	Flash 9	18x
256	320x240	15	H.264	AAC	Flash 9	21x
256	320x240	15	H.264	AAC	3GPP	21x
256	320x240	15	H.264	AAC+	MP4	21x
180	320x240	10	MPEG-4	AAC	MP4	24x
160	176x144	10	H.263	AMR	MP4	26x

Specifications subject to change without notice.