

HERA 4000m MULTI-CHANNEL MOBILE TV TRANSCODER

THE MOST DENSE, SCALABLE REAL-TIME TRANSCODER DELIVERING THE HIGHEST QUALITY MULTI-FORMAT VIDEO OUTPUTS.

- > Live Mobile TV Streaming over 2.5G, 3G
- > Broadcast TV Delivery (DVB-H/MediaFLO)
- > 16 input channels single-pass transcoding
- > 8 channels real-time dual-pass transcoding
- > 8 SDI input channels in 1RU

8 channel Real-Time Video Transcoder Appliance for adapting Satellite or Cable TV content and broadcast to multiple types of Mobile devices by delivering multiple high-quality compressed video streams. Designed to meet rapidly evolving Mobile TV market demands for distribution over unicast, broadcast and broadband networks. HERA 4000m is flexible, configurable, customizable, scalable and upgradeable so that operators, systems integrators and content owners can deploy services organically.

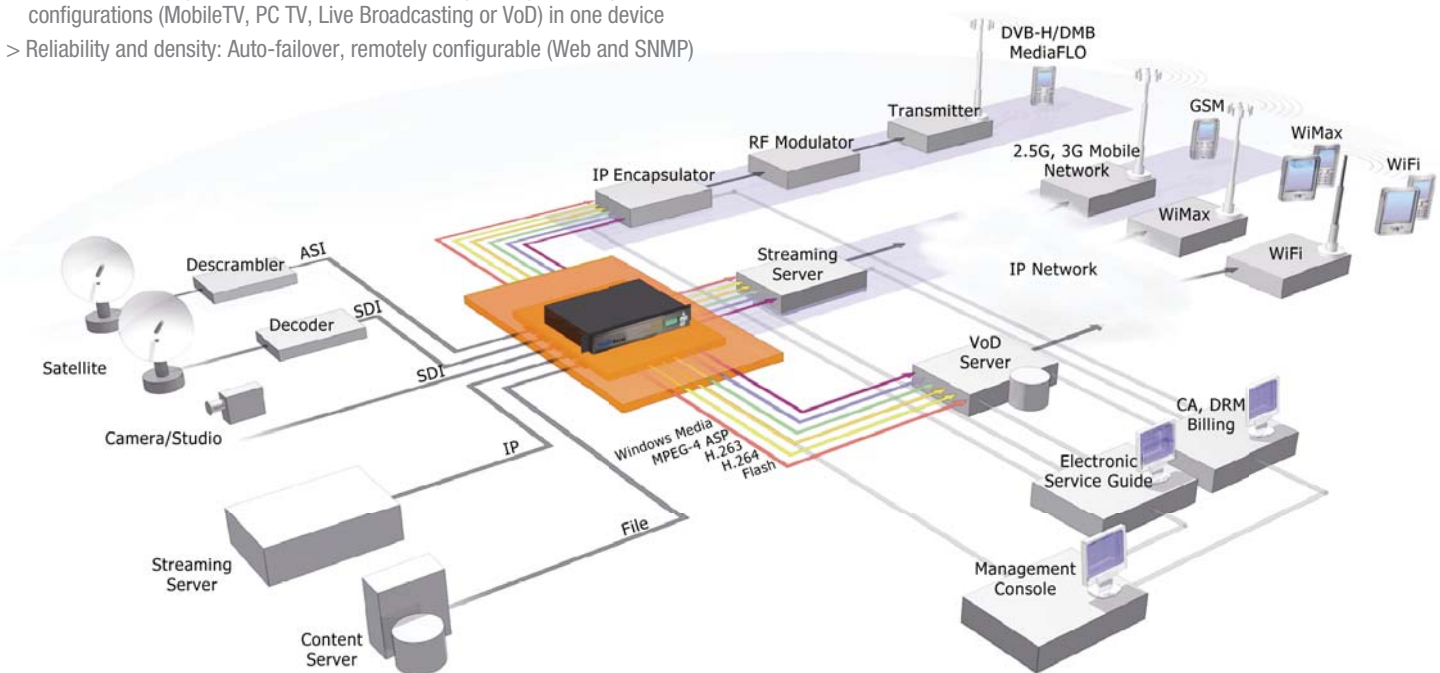
HIGHLIGHTS

- > 8 input channels with up to 15 simultaneous output profiles per channel
- > Telco grade appliance, natively accepting MPEG-2 input directly from DVB-S and DVB-T (through ethernet and/or DVB-ASI input)
- > Wide standards support, developed in house: Satellite, Cable, IP and Analog inputs; streaming over DSL/WiFi, WiMax, Cell, DVB and 3GPP networks
- > Maximum flexibility: Multi-codec, multi-channel input/output, multiple software configurations (MobileTV, PC TV, Live Broadcasting or VoD) in one device
- > Reliability and density: Auto-failover, remotely configurable (Web and SNMP)



APPLICATIONS

- > Mobile 2.5G, 3G & 4G Television Services
- > DVB-H & MediaFLO Mobile TV Broadcasting
- > DSL, WiFi and WiMax Broadband Services
- > Mobile TV Video on Demand (VoD) Services
- > Transcoding, Transrating and Network Shaping for Live Broadcasting



HERA 4000m

TECHNICAL SPECIFICATIONS

Inputs:

Interfaces Gigabit Ethernet
DVB-ASI (EN50083) 0-214 Mbit/s
SD/HD-SDI (SMPTE 259M) 625/525 with embedded audio

Network TCP, UDP, RTP, RTCP, RTSP, Unicast/Multicast clients

Transmission DVB-ASI SPTS/MPTS, DVB-T/S

Media Format MPEG-2 TS/PS (ISO/IEC 13818-1, ISO/IEC 11172-1)
MPEG-2 SD/HD
MPEG-4 ASP (ISO/IEC 14496-2)
MPEG-1 Audio Layers I, II
AC-3 Audio (pass-through)
Uncompressed audio/video

Outputs:

Network TCP, UDP, RTP, RTCP, RTSP, ISMA, IGMPv2.0

Transmission DVB-H (ETSI 102 005), 3GPPv2, 3GPPv6, DMB, ISDB-T, MP4
SAP/SDP announcement
Network traffic shaping/smoothing

Media Format MPEG-4 - mp4 format (ISO/IEC 14496-1)
H.264/AVC (ISO/IEC 14496-10) - Baseline/Main Profile
Flash 9 H.264
H.263 (ITU-T H.263), 3GP2, 3GPP
Windows Media 9 (Q1)
AAC/AAC-HE - Advanced Audio Coding (MPEG2, MPEG4)
Adaptive Multi-Rate (AMR) Audio
Unicast and Multicast
PacketVideo, Darwin, Flash Media Server Support

Transcoding / Encoding Features:

Video H.264 / AVC (ISO/IEC 14496-10) - Base/Main/High Profile
MPEG-4 SP/ASP (ISO/IEC 14496-2)
Windows Media 9 Video
Bit Rates: 8 Kbps – 4 Mbps
Frame Rates: 1 – 60 Hz
Resolutions:
SQVGA (160x120), QCIF (176x144), QVGA (320x240),
SIF/CIF (352x240/288), VGA (640x480) or custom size
Dual Pass encoding
Bit Rate Control: CBR, VBR, Adaptive
Configurable motion search range
Multiple reference frames with quarter-pel search
CAVLC / CABAC, Interlace support, B frame support
Enhanced scene-change detection logic
De-blocking & noise reduction filters
Brightness/Contrast control, Sharpness control
Cropping, Aspect ratio conversion, Scaling
MP4 hinting

Audio MPEG-4 ISO/IEC 14496-3 GA (General Audio)
AAC (Advance Audio Coding), MPEG2 and MPEG4
Profiles: LC (Low Complexity) and HE (High Efficiency)
Windows Media 9 Audio
ADTS header format, LATM packetization
Tools: TNS
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

System Configuration:

Management	SNMP v.2 alerts / traps / remote control Web Management Console XML-based profiles SDK for integration with custom applications Constant monitoring of I/O streams Fully Compliant with HERA Management System DVB-SimulCrypt interface for CAS support
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
Watchdog	Integrated 6300ESB, 1-255 sec, 1-255 min
LCD Panel	2 x 16 character LCD control panel with backlight 6 keys mini keyboard
I/O Connectors	2 x Gigabit Ethernet (up to 4 optionally) DVB-ASI (EN50083) 75Ω BNC (in) SD/HD - SDI (SMPTE 259M) BNC (in)
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 4000m: Gigabit Ethernet only
HERA 4000m.a: DVB-ASI (EN50083) (in)
HERA 4000m.s: SDI (SMPTE 259M) (in)



Specifications subject to change without notice.