Business Benefits

Cost Effective
With its modular and scalable architecture, the NOVUS-MT provides rich audio / video transcoding support with unmatched CAPEX / OPEX advantages.

Future Proof
With real-time ‘any-to-any’ multistandard codec support, the transcoder adapts services from both MPEG-2 and MPEG-4 AVC systems.

Flexible Networking
The transcoder supports UDP and RTP, permitting reliable video delivery over any IP network.
NOVUS-MT direct processing technology delivers enhanced IP network jitter and latency performance.

High Density
The NOVUS-MT transcoder can support up to 4 transcoding channels simultaneously. The NOVUS-MT can be used standalone or combined in a 1RU rack-mount tray (up to 3 NOVUS-MT for tray), providing 12 transcoding channels simultaneously.

Control & Monitoring
The DashBoard™ Network Control & Monitoring software is used for remote control, monitoring and software update.

- Up to 4 transcoding channels, HD and SD support
- MPEG-2 to H.264, H.264 to MPEG-2
- Resolution resizing, bitrate reduction
- IP and ASI inputs/outputs
- MPTS/SPTS multiplexing/demultiplexing

The NOVUS-MT is a powerful and flexible real-time transcoding solution supporting MPEG-2 and MPEG-4 AVC video codecs and a wide variety of audio codecs. It is ideally suited for any content repurposing, edge transcoding, or video distribution network bandwidth optimization application. NOVUS-MT has been designed to meet the demanding requirements of the IPTV, professional broadcast, enterprise video delivery, and streaming video markets.

The scalable and cost-effective modular design is capable of simultaneously transcoding up to four High Definition or Standard Definition video services. If desired, up to three units (12 transcoding channels) can be installed in a 1RU rack-mount tray. Using NOVUS-MT’s unique transcoding architecture, operators can transcode multiple HD and SD services in a compact modular unit.

NOVUS-MT multi-standard broadcast transcoder is equipped with the latest advances in video compression technology to deliver excellent video quality at low bitrates. State of the art video processing combined with unique encoding technology enables new open system architectures to be created.

Simultaneous support of DVB-ASI and broadcast video over IP allows content to be freely distributed over virtually any video network.

Key Features

- Multi-Standard transcoder (MPEG-2 and H.264), with support for both SD and HD content.
- Up to 4 simultaneous transcoding channels: MPEG-2 to H.264; H.264 to MPEG-2; HD and SD support.
- Resolution resizing, bitrate reduction.
- Audio pass-through support.
- Audio transcoding support: MPEG-1 Layer II, AAC-LC and Dolby AC-3 inputs; MPEG-1 Layer II and AAC-LC outputs.
- 2 ASI input ports and 2 ASI output ports. All ports support the full ASI line rate of 213 Mb/s.
- 2 Ethernet ports with 100/1000 Mb/s support.
- UDP/RTP (unicast/multicast) support for Ethernet transmission/reception.
- (P)SI parsing and generation; ATSC table parsing.
- MPTS to SPTS Splitting support.
- Separate Ethernet ports for streaming and control.

ORDERING INFORMATION

NOVUS-MT-2 - MPEG-2/H.264 transcoder with 2 transcoding channels
NOVUS-MT-4 - MPEG-2/H.264 transcoder with 4 transcoding channels

Available Options
OPT-Dolby - transcode Dolby audio to MPEG-1 Layer II or AAC-LC
NOVUS-MT - Multistandard Broadcast Transcoder

Inputs and Outputs
- 2x 100/1000Base-T RJ-45 ports, auto-negotiate or fixed speed
- 2x DVB-ASI input ports, BNC 75 ohm
- 2x DVB-ASI output ports, BNC 75 ohm
- 213 Mbit/s maximum ASI TS bit-rate per port

Network Transport Protocols
- UDP/IP (Unicast and Multicast)

Video Transcoding
- Input: MPEG-4 AVC @L4.0, @L4.2 (HD)
  - MPEG-4 AVC @L3.0 (SD)
  - MPEG-2 HP@HL (HD)
  - MPEG-2 MP@ML (SD)
- Output: MPEG-4 AVC @L4.0, @L4.2 (HD)
  - MPEG-4 AVC @L3.0 (SD)
  - MPEG-2 HP@HL (HD)
  - MPEG-2 MP@ML (SD)
  - CBR & VBR

Video Formats
- Input: 1080 x 1920p 60/50
  - 1080 x 1920/1440i 25 29.97/30
  - 720 x 1280/960 50/59.94
  - 960 x 540 25
  - 480 x 720/704/640/528 29.97
  - 576 x 720/704/640/528 25
  - 640x480, 480x270, 320x240, 320x180
- Output: 1080 x 1920p 60/50
  - 1080 x 1920/1440i 25 29.97/30
  - 720 x 1280/960 50/59.94
  - 960 x 540 25
  - 480 x 720/704/640/528 29.97
  - 576 x 720/704/640/528 25
  - 640x480/360, 480x270, 320x240, 320x180
  - 29.97, 25, 15, 12.5, 7.5, 6.25 frames/second

Audio Transcoding
- Input: MPEG-1 layer II stereo
  - MPEG-4 AAC-LC stereo and 5.1
  - MPEG-4 HE-AAC 5.1
  - Dolby AC-3 stereo, 5.1, 7.1
- Output: MPEG-1 layer II
  - MPEG-4 AAC-LC
  - Pass through

Video Processing
- Integrated down conversion
  - HD to SD
  - Sub-SD resolutions
- Adaptive deinterlacer
- Frame rate reduction
- AFD handling
- Closed captions and VBI pass-through

Audio Conversion
- CBR & VBR

Physical
- Dimensions: (W x D x H) 146 x 356 x 44mm
- Desktop or 1RU rack mountable tray available—3 modules per tray
- Power: 16 Watts total power consumption
- AC input 100-240 VAC 47-63Hz

Environmental
- Operating Temperature: 0°C to 50°C (32°F to 122°F)
- Operating Humidity: 5% to 95% (non-condensing)

Compliance
- CE: CE marked in accordance with 93/68/EEC (22/07/03) Directive
- UL: UL approval
- US FCC: Part 15
- EMC: EN55022, EN55024, EN61000-3-2

Rear Panel:
- ASI1
- ASI2
- ASI3
- ASI4
- ASI5
- CTRL1 ETH1
- CTRL2 ETH2

Rack mount 1RU Tray:
- Holds up to 3 NOVUS units (up to 12 transcoding channels)

Management
- 10/100/1000Base-T Ethernet (RJ-45)
- Configuration import/export
- Visual fault indicator
- SNMP v1, v2
- Datasafe™ automated card configuration

Contact info: sales@advanceddigital.ca
WEB: http://www.advanceddigital.ca
Tel: +1 416 479 0480
+1 416 848 0715

Note: NOVUS-MT specifications are subject to change.