**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 a rich set of standard video networking protocols including UDP, RTP, RTMP and HTTP Live Streaming (HLS), permitting reliable video delivery over any IP network.

**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.

**Business Benefits**

- Up to 4 transcoding channels, HD and SD support
- MPEG-2 to H.264, H.264 to MPEG-2
- Resolution resizing, bitrate reduction
- UDP/RTP (unicast/multicast), RTMP, HLS streaming
- 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-TM's unique transcoding architecture, operators can transcode multiple HDand SD services in a compact modular unit.

NOVUS-MT multistandard 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, broadcast video over IP, RTMP and HTTP Live Streaming 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.
- UDP/RTP (unicast/multicast), RTMP, HLS support for Ethernet transmission.
- Internal program replication - individual programs can be routed to multiple outputs.
- Internal MPTS (Multi-Program Transport Stream) multiplexing and demultiplexing.
- (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
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)
RTP/IP (Unicast and Multicast)
RTMP (Flash)
HTTP Live Streaming (HLS): populates an external web server through FTP or SFTP
Automatically generates web pages with a video window for all supported modes (VLC plug in required)

Transcode Modes
Multi-codec capable
MPEG-2 to MPEG-4 AVC (H.264)
MPEG-4 AVC (H.264) to MPEG-2
MPEG-2 to MPEG-2 and MPEG-4 (H.264) to MPEG-4 (H.264):
- re-encode
- format conversion
- bit rate reduction
UDP/RTP to RTMP, HLS

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

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

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

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
Conversion

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

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

Note: NOVUS-MT specifications are subject to change.