

- Transcodes a single program received from IP (unicast/multicast) or ASI inputs
- Outputs simultaneously up to 8 adaptive rate streaming resolution/rate profiles
- Input: MPEG-2 or H.264 (MPEG-4 AVC)
- Output: H.264 (MPEG-4 AVC)
- RTP/UDP, UDP, RTMP and HTTP Live Streaming (HLS) protocol support
- Downconversion, adaptive de-interlacer, bit rate reduction, frame rate reduction



Made in the USA

Business Benefits

Cost Effective

With its modular and scalable architecture, the NOVUS-AT provides an adaptive bit rate transcode solution with unmatched CAPEX / OPEX advantages.

Future Proof

With real time 'any-to-any' multistandard codec support, the transcoder is able to seamlessly adapt services from MPEG-2 and MPEG-4 AVC systems.

Flexible Networking

The NOVUS-AT supports adaptive rate streaming technologies including TS, RTMP and HTTP Live Streaming permitting reliable video delivery to virtually any device and over any network.

Control & Monitoring

The DashBoard™ Network Control & Monitoring software is a free application designed for remote control & monitoring of the open architecture, openGear™ platform.

For larger deployments where multiple units are deployed, the DashBoard™ application or SNMP may be used for firmware updates and monitoring.

Application

The NOVUS-AT Adaptive Bit Rate Transcoder is a powerful real time transcoding solution designed to meet rapidly evolving demands of adaptive rate streaming video delivery applications. The product meets the challenge by providing high quality video to a wide variety of viewing devices over a wide variety of networks and network conditions and meets the demanding requirements of Broadcast, Web, and Mobile video services delivery.

As sports, movies, and other programming is more commonly viewed on PCs, tablet computers, smart phones, and IP enabled set-top boxes, dynamic adaptive rate streaming technology enables a new paradigm in video service delivery. Employing cutting edge adaptive rate streaming protocols, the NOVUS-AT permits video services to be delivered to any device, anywhere, and over any IP network.

The scalable and cost effective modular design is capable of simultaneously transcoding and formatting video services into multiple segmented adaptive profiles ranging from full HD down to sub-SD resolutions. An elegant streaming protocol permits a video decoder to seamlessly and dynamically adapt to the profile best suited to its capabilities and current network conditions.

NOVUS-AT Adaptive Bit Rate Transcoder is equipped with the latest advances in video compression technology. State of the art video processing combined with our unique encoding technology permits the best possible video quality at a given resolution and bit rate profile.

Up to three NOVUS-AT units can be installed in a 1RU rack mount tray. Using NOVUS-AT's unique transcoding architecture, multiple adaptive rate streaming profiles can be supported in a compact modular unit.

Features

The NOVUS-AT ABR Transcoder is able to transcode a single program received from IP or ASI. The program can be output using multiple resolution and rate profiles over IP interfaces using the adaptive rate streaming protocol of choice. A flexible licensing model allows for easy addition of feature options expanding the capabilities of each module.

- Single multi-standard (MPEG-2 or MPEG-4 AVC) HD/SD transcoder
- RTP/UDP, UDP, RTMP and HTTP Live Streaming (HLS) protocol support
- Up to 8 adaptive rate streaming resolution/rate profiles
- Downconversion, adaptive de-interlacer, bit rate reduction, frame rate reduction
- MPEG-1 Layer II, AAC, and Dolby AC-3 input audio
- Management and control via openGear™ Dashboard software or SNMP
- IP unicast/multicast input, ASI Inputs

ORDERING INFORMATION

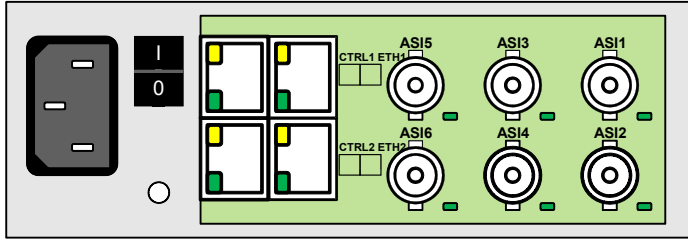
NOVUS-AT - Adaptive Bit Rate Transcoder with 4 streaming resolution/rate profiles

Available Options

OPT-4PR - 4 additional adaptive streaming resolution/rate profiles

OPT-Dolby - Dolby Audio Conversion

Rear panel:



Rack mount 1RU Tray:



Holds up to 3 NOVUS units

Inputs and Outputs
2x 100/1000Base-T RJ-45 ports, auto-negotiate or fixed speed
2x ASI Inputs

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

Up to 8 resolution/rate profiles per unit

Transcode Modes
Multi-codec capable
MPEG-2 to MPEG-4 AVC (H.264)
MPEG-4 AVC (H.264) to MPEG-4 AVC (H.264)

Video Processing
Integrated down conversion
- HD to SD
- Sub-SD resolutions
Adaptive de-interlacer
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)
CBR & VBR
1.5Mbps to 10 Mbps (profile dependent)

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 25/29.97
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 25/29.97
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
Conversion
5.1 -> 5.1, 2.0

Management
100/1000Base-T Ethernet (RJ-45)
Configuration import/export
Visual fault indicator
SNMP v1,v2

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
Convection cooling

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 89/336/EEC, 72/23/EEC and 1999/5/EEC Directives
EMC: EN55022, EN55024, EN6100, FCC Part 15
SAFETY: IEC 60950
ROHAS: 2011/65/EU
WEEE: 2012/19/EU

Note: NOVUS-AT specifications are subject to change.