



## VERSATIVE® PRO

### VersActive® Pro Professional Quality Transcoder

#### Applications:

- ▶ Cost-effective, multichannel transcoding
- ▶ Simultaneous HD & SD transcoding for local/regional channel conversion requirements
- ▶ Converting providers' content (MPEG-2>, 4>2) to accommodate varying broadcast inputs & set-top architectures
- ▶ Bit rate changing to reduce IPTV stream bandwidth and accommodate downstream end devices
- ▶ Creating multiple MBR output rates from multiple inputs

#### Key Features:

##### License-free = Hassle-free

- ▶ Transcode what you want, when you want

##### Exceptionally Priced

- ▶ Why pay more?

##### Professional Video Quality

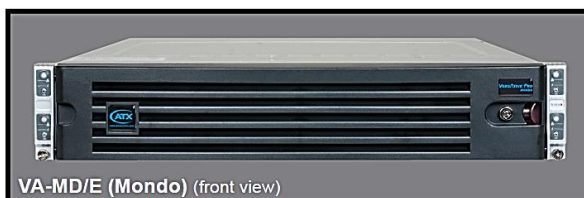
- ▶ High quality video at minimal bit rates



VA-GR/E (Grande) (front view)



VA-GR/E (Grande) (rear view)



VA-MD/E (Mondo) (front view)



VA-MD/E (Mondo) (rear view)

#### Product Line Overview:

##### Input

- ▶ Video: MPEG-2 or H.264, up to 1080p
- ▶ Audio: AAC-LC, AC-3 2.0/5.1, MPEG-1 L2/3, HE-AAC v1, E-AC3

##### Output

- ▶ Video: MPEG-2 or H.264, up to 1080p
- ▶ Audio: AAC-LC, MPEG-1 L2/3, AC-3 2.0/5.1, HE-AAC v1, E-AC3
- ▶ Protocol: UDP

##### Other Features

- ▶ Video: Up/downscale, cropping, frame rate conversion, deinterlacing
- ▶ Audio: Sample rate conversion, configurable audio delay
- ▶ Multiple publishing destinations per output stream
- ▶ Multiple output port streaming
- ▶ Output port mirroring
- ▶ CBR/VBR output
- ▶ Configurable GOP (H.264)
- ▶ Bit rate & session monitoring
- ▶ Management: HTTP GUI
- ▶ Closed Captioning (EIA-608 & EIA-708), Teletext & SCTE 35 pass through
- ▶ Low latency
- ▶ Private PID pass through
- ▶ PSI monitoring
- ▶ SNMP-based monitoring, ie. SNMP traps
- ▶ DVB\* subtitle overlay
- ▶ VLAN segmentation
- ▶ NTP time management
- ▶ User access management
- ▶ HD/SD simulcast output from one single input program (MBR output from single input program)

VersActive® Pro Transcoder Specifications

SYSTEM PLATFORM SPECIFICATIONS	VA-GR/E	VA-MD/E
<b>MECHANICAL &amp; ENVIRONMENTAL</b>		
FORM FACTOR	1RU (19" Rack Mount)	2RU (19" Rack Mount)
DIMENSIONS	1.75"H x 19.0"W x 16.9"D (4.45H x 48.26W x 42.9D cm)	3.5"H x 19.0"W x 28.5"D (8.89H x 48.26W x 72.4D cm)
WEIGHT	25.4 lbs (11.5 kg)	83.8 lbs (38.0 kg)
OPERATING TEMPERATURE/HUMIDITY	+10°C to +35°C (+50°F to +95°F) / 8-90% (Non-condensing)	
<b>CONTROL &amp; MANAGEMENT</b>		
FRONT PANEL BUTTONS	Power ON/OFF	Power ON/OFF (x4), ID (x4)
FRONT PANEL LEDs	Power, Hard Drive Activity, Network Activity, Info	Power (x4), Hard Drive Activity (x4), Network Activity (x4), Info (x4)
DEVICE MANAGEMENT	Local/Remote Access via Integrated Web Server, HTTP Web GUI	
DEVICE MANAGEMENT INTERFACE	ETH RJ45, Static IP	ETH RJ45, Static IP (x4)
<b>POWER SUPPLY</b>		
POWERING	Redundant AC Power Supply 2x 400W, 100-240 VAC, 50-60 Hz	Redundant AC Power Supply 2x 1600W, 100-140 / 180-240 VAC, 50-60 Hz
POWERING CONNECTOR	2x IEC (C14 Inlet)	2x IEC (C14 Inlet)
<b>PHYSICAL INTERFACES</b>		
LAN (IP) INTERFACES	6x Gbps ETH RJ45 for IP Traffic & Management, 1x IPMI RJ45	6x Gbps ETH RJ45 (x4), 1x IPMI RJ45 (x4)
VIDEO MONITOR INTERFACE	VGA, DE-15 Female	VGA, DE-15 Female (x4)
USB INTERFACES	4x USB 2.0, Type A (on rear)	2x USB 3.0, Type A (on rear) (x4)
<b>IP TRANSPORT I/O CHARACTERISTICS</b>		
PHYSICAL PORT ADDRESS	Static IP Address	
TRANSPORT LAYER PROTOCOL (IN)	UDP	
TRANSPORT LAYER PROTOCOL (OUT)	UDP	
TRANSPORT STREAM SUPPORT (IN)	MPTS, SPTS	
TRANSPORT STREAM SUPPORT (OUT)	SPTS	
ADDRESSING	Multicast & Unicast	

TRANSCODING SPECIFICATIONS	VA-GR/E	VA-MD/E
VIDEO	Up/Downscaling, Cropping, Frame Rate Conversion, Deinterlacing	
AUDIO	Sample Rate Conversion, Audio Pass Through	
<b>VIDEO OUTPUT</b>		
ENCODING FORMAT	MPEG-2 MP@ML / MP@HL and H.264 High Profile @L4.0	
CHROMA FORMAT	4:2:0	
RESOLUTIONS	128 x 96 to 1920 x 1080	
ENCODING BIT RATE	80-18200 kbps	
FRAME RATES	1 / 4 / 5 / 6 / 8 / 10 / 12 / 15 / 23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60 fps	
<b>AUDIO OUTPUT</b>		
ENCODING STANDARD	MPEG-1-L2/3, AAC-LC, AC-3 2.0/5.1, HE-AAC v1, E-AC3	
SAMPLE RATE	32 / 44.1 / 48 kHz	
AUDIO BIT RATE	192, 256, 384 kbps (MPEG-1 L2) 32-256 kbps (MPEG-1 L3) 24-448 kbps (AC-3 2.0/5.1, AAC-LC, HE-AAC v1) 16-448 kbps (E-AC3)	
AUDIO DELAY	+/- 1000mS	

Ordering Information

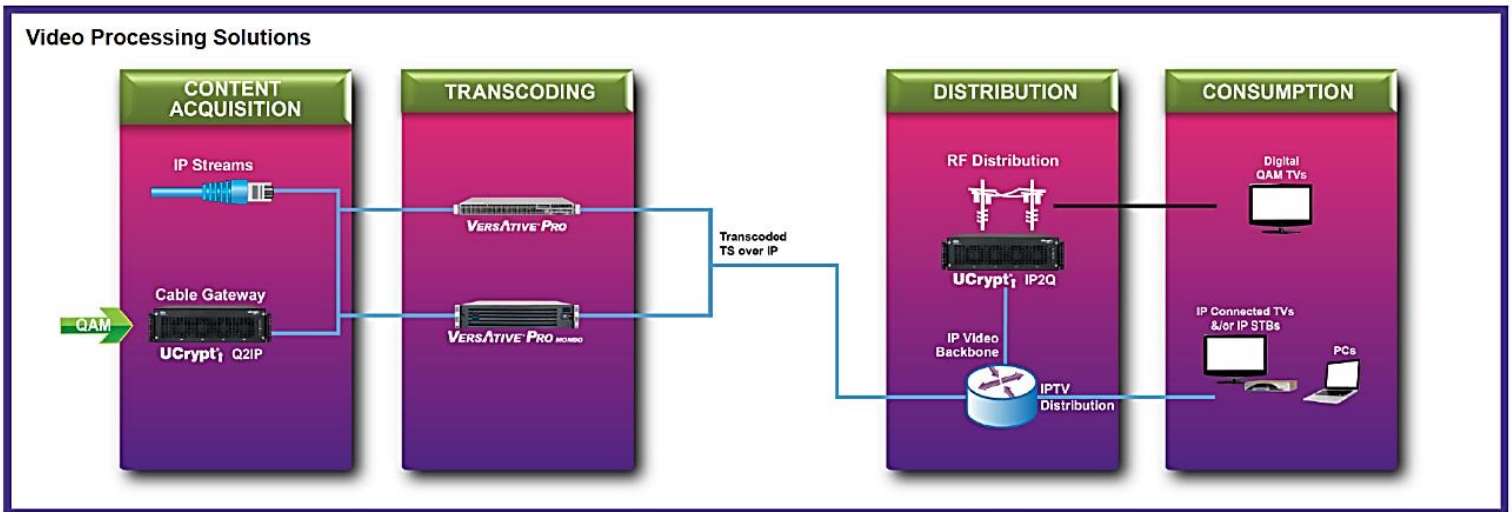
Part Number	Description
VA-GR/E	VersActivePro Grande Enhanced, Redundant AC Power Supply
VA-MD/E	VersActivePro Mondo Enhanced, Redundant AC Power Supply
VA-GR/E-DE	VersActivePro Grande Enhanced, Dolby Enabler
VA-MD/E-DE	VersActivePro Mondo Enhanced, Dolby Enabler



# VERSATIVE<sup>®</sup> PRO

VersActive<sup>®</sup>Pro Professional Quality Transcoder

## Application Diagram



## Appendix: VersActive<sup>®</sup>Pro Processing Capacity

SPECIFICATIONS	PROCESSING CAPACITY	INPUT BITRATE (Mbps)	OUTPUT BITRATE (Mbps)	1080i (29.97 fps)	1080i (29.97 fps) to 720p (29.97 fps)	1080i (29.97 fps) to 480i (29.97 fps)	720p (29.97 fps)	720p (29.97 fps) to 480i (29.97 fps)	480i (29.97 fps)
				NTSC					
VA-MD/E	MPEG-2 to MPEG-2	18	15	48	44		84		
	MPEG-2 to MPEG-2 (SD)	18	4			92			
	MPEG-2 (SD) to MPEG-2 (SD)	6+	6						160
	MPEG-2 to H.264	18	5	36	36		60		
	MPEG-2 to H.264 (SD)	18	2			92		152	
	MPEG-2 (SD) to H.264 (SD)	6+	2						204
	H.264 to MPEG-2	5	15	40	56		76		
	H.264 to MPEG-2 (SD)	5	6			76		88	
	H.264 (SD) to MPEG-2 (SD)	2	6						148
	H.264 to H.264	5	5	36	36		60		
VA-GR/E	H.264 to H.264 (SD)	5	2			84			
	H.264 (SD) to H.264 (SD)	2	2						200
	MPEG-2 to MPEG-2	18	15	12	11		21		
	MPEG-2 to MPEG-2 (SD)	18	4			23			
	MPEG-2 (SD) to MPEG-2 (SD)	6+	6						40
	MPEG-2 to H.264	18	5	9	9		15		
	MPEG-2 to H.264 (SD)	18	2			23		38	
	MPEG-2 (SD) to H.264 (SD)	6+	2						51
	H.264 to MPEG-2	5	15	10	14		19		
	H.264 to MPEG-2 (SD)	5	6			19		22	
	H.264 (SD) to MPEG-2 (SD)	2	6						37
	H.264 to H.264	5	5	9	9		15		
	H.264 to H.264 (SD)	5	2			21			
	H.264 (SD) to H.264 (SD)	2	2						50