VERSATIVE® PRO MONDO

Patent Pending

License-free

VersAtive®Pro Mondo Professional Quality Transcoder:

Applications:

▸ Cost-effective, multichannel transcoding/packaging

▸ Simultaneous HD & SD transcoding for local/regional channel conversion requirements

▸ Converting providers' content (MPEG-2>4, 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

▸ Creating ABR profiles (with built-in packager) to multiscreen profiles (iOS & Flash®)

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

VersAtivePro Mondo Chassis (front view)

VersAtivePro Mondo Chassis (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
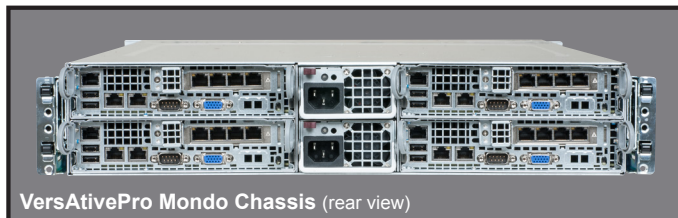
▸ Video: MPEG-2 or H.264, up to 1080p

▸ Audio: AAC-LC, MPEG-1 L2/3, AC-3 2.0/5.1, HE-AAC v1, E-AC3

▸ Formats: HLS, Flash

▸ Protocols: HTTP, UDP/RTP, RTMP

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

▸ Radius-based user authentication

▸ 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)

ATX

VersAtive®Pro Mondo Professional Quality Transcoder:

VersAtive®Pro Mondo Transcoder Specifications

SYSTEM PLATFORM SPECIFICATIONS	
MECHANICAL & ENVIRONMENTAL	
FORM FACTOR	2RU (19" Rack Mount)
DIMENSIONS	3.5"H x 19.0"W x 30.5"D (8.89H x 48.26W x 77.47D cm)
WEIGHT	83.8 lbs (38.0 kg)
OPERATING TEMPERATURE/HUMIDITY	+10ºC to +35ºC (+50ºF to +95ºF) / 8-90% (Non-condensing)
CONTROL & MANAGEMENT	
FRONT PANEL BUTTONS	System Power Button with LED (x4), System ID LED Button (x4)
FRONT PANEL LEDs	System Status LED (x4), Network Link/Activity LED (x4)
DEVICE MANAGEMENT	Local/Remote Access via Integrated Web Server, HTTP Web GUI
DEVICE MANAGEMENT INTERFACE	ETH RJ45, Static IP (x4)
POWER SUPPLY	
POWERING	1600W Redundant AC Power Supply
POWERING CONNECTOR	2x IEC (C14 Inlet)
PHYSICAL INTERFACES	
LAN (IP) INTERFACES	6x Gbps ETH RJ45 (x4), 1x IPMI RJ45 (x4)
VIDEO MONITOR INTERFACE	VGA, DE-15 Female (x4)
USB INTERFACES	2x USB 2.0, Type A (x4)
IP TRANSPORT I/O CHARACTERISTICS	
PHYSICAL PORT ADDRESS	Static IP Address
TRANSPORT LAYER PROTOCOL (IN)	UDP, RTP
TRANSPORT LAYER PROTOCOL (OUT)	UDP, RTP, RTMP, HLS
TRANSPORT STREAM SUPPORT (IN)	MPTS, SPTS
TRANSPORT STREAM SUPPORT (OUT)	SPTS, MPTS
ADDRESSING	Multicast & Unicast

TRANSCODING SPECIFICATIONS	
MAXIMUM PROCESSING CAPACITY[1]	
MPEG-2 1080i TO H.264 1080i @ 5 Mbps/29.97fps	28
MPEG-2 1080i TO H.264 MBR[2] @ 29.97fps	16
MPEG-2 1080i to H.264 1080i @ 5 Mbps/25fps	36
MPEG-2 1080i TO H.264 MBR[2] @ 25fps	20
VIDEO	Up/Downscaling, Cropping, Frame Rate Conversion, Deinterlacing
AUDIO	Sample Rate Conversion, Audio Pass Through
VIDEO OUTPUT	
ENCODING FORMAT	MPEG-2 MP@ML / MP@HL and H.264 High Profile @L4.0
CHROMA FORMAT	4:2:0
RESOLUTIONS	128x96 to 1920x1080
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 / 60fps
AUDIO OUTPUT	
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

NOTES:

(1) For other transcode combinations, please see Appendix, use online calculator tool (http://atxnetworks.com/vpcalc/) or contact ATX Digital Video Support at digitalvideosupport@atxnetworks.com

(2) MBR = 1080i @ 5Mbps + 720p 29.97/25 @ 2Mbps + 480i/576i @ 1Mbps

The processing capacity numbers provided are for guideline purposes only. The actual processing capacity of the unit will depend on content/system configuration.

VersAtive®Pro Mondo Professional Quality Transcoder:
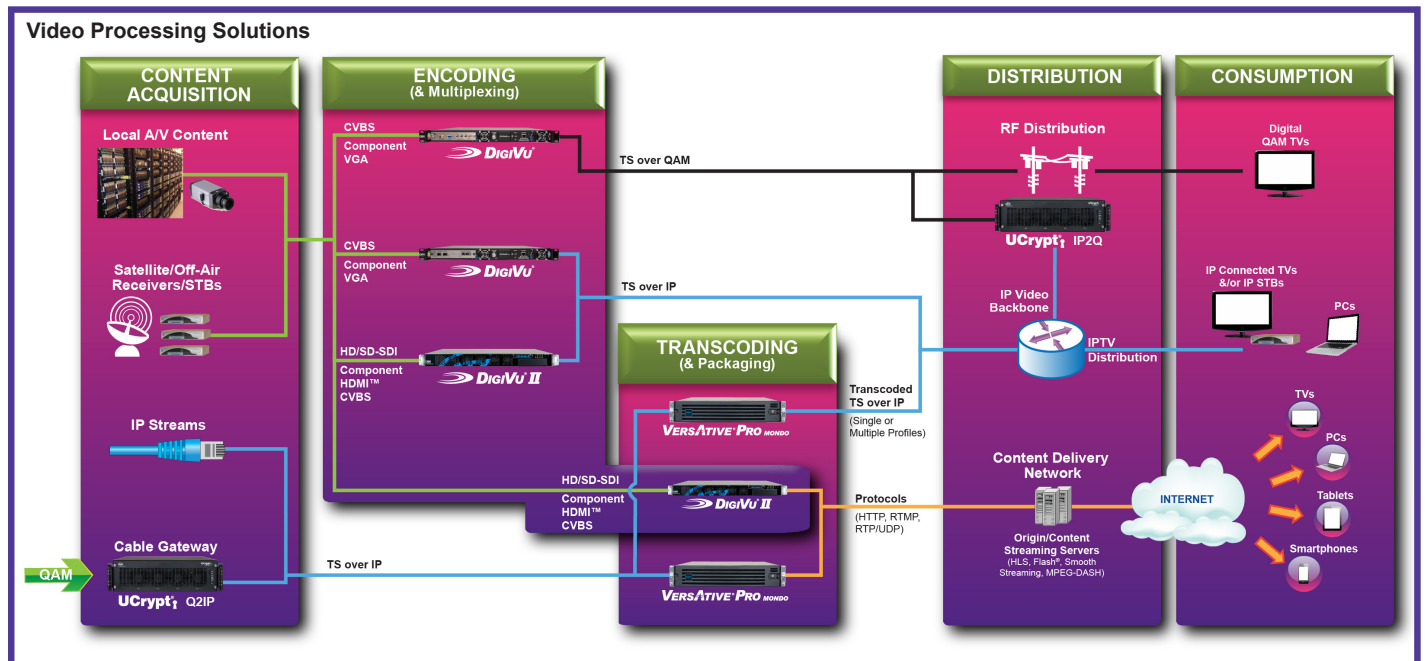
VersAtive®Pro Mondo Transcoder Specifications (cont'd)

OUTPUT FORMATS/PROTOCOLS SPECIFICATIONS		
	Apple HLS	**Adobe® Flash®**
FORMAT	HLS, Segmented MPEG-2 TS	--
PROTOCOL	HTTP	RTMP
VIDEO ENCODING	H.264	H.264
AUDIO ENCODING	AAC-LC	AAC-LC

Ordering Information

Part Number	Description
VA-MD	VersAtivePro Mondo, Redundant AC Power Supply

Part Number	Description
DOLBY ENABLER	
VA-MDDE	Mondo VersAtivePro, Dolby Enabler

Application Diagram

Specifications subject to change without notice.

VersAtive®Pro Mondo Professional Quality Transcoder:

Appendix: VersAtive®Pro Mondo Processing Capacity

PROCESSING CAPACITY		1080i 29.97fps	1080i 25fps	1080i 29.97fps > 480i 29.97fps	1080i 25fps > 576i 25fps	480i 29.97fps	576i 25fps
MONDO	H.264 TO MPEG-2	20	24	60	68	100	100
	H.264 TO H.264	28	32	60	68	100	100
	MPEG-2 TO MPEG-2	20	24	76	84	100	100
	MPEG-2 TO H.264	28	36	72	84	100	100
VA-G* (Grande)[1]	H.264 TO MPEG-2	5	6	15	17	25	25
	H.264 TO H.264	7	8	15	17	25	25
	MPEG-2 TO MPEG-2	5	6	19	21	25	25
	MPEG-2 TO H.264	7	9	18	21	25	25
VA-M* (Medium)[1]	H.264 TO MPEG-2	3	4	10	11	19	20
	H.264 TO H.264	4	5	10	11	18	20
	MPEG-2 TO MPEG-2	3	4	13	14	21	22
	MPEG-2 TO H.264	5	6	12	14	19	22
VA-S* (Small)[1]	H.264 TO MPEG-2	2	2	6	7	12	12
	H.264 TO H.264	2	3	6	7	11	11
	MPEG-2 TO MPEG-2	2	2	8	9	13	13
	MPEG-2 TO H.264	3	3	8	9	12	13

NOTES:

(1) See VersAtivePro Transcoder spec sheet for details.

* = "R" for Redundant AC Power Supply or "RDC" for Redundant DC Power Supply

MPEG-2 1080i = 18 Mbps

MPEG-2 480i/576i = 6 Mbps

H.264 1080i = 5 Mbps

H.264 480i/576i = 2 Mbps

For other transcode combinations, please use online calculator tool (http://atxnetworks.com/vpcalc/) or contact ATX Digital Video Support at digitalvideosupport@atxnetworks.com

The processing capacity numbers provided are for guideline purposes only. The actual processing capacity of the unit will depend on content/system configuration.

Specifications subject to change without notice.

ISO
9001
REGISTERED

1-501 Clements Road West, Ajax, ON L1S 7H4 Canada
Tel (905) 428-6068   Toll Free (800) 565-7488   Fax (905) 427-1964   Toll Free Fax (866) 427-1964
www.atxnetworks.com   support@atxnetworks.com

Page 4 of 4

Printed in Canada

Rev. 05/16 (ANW1040)