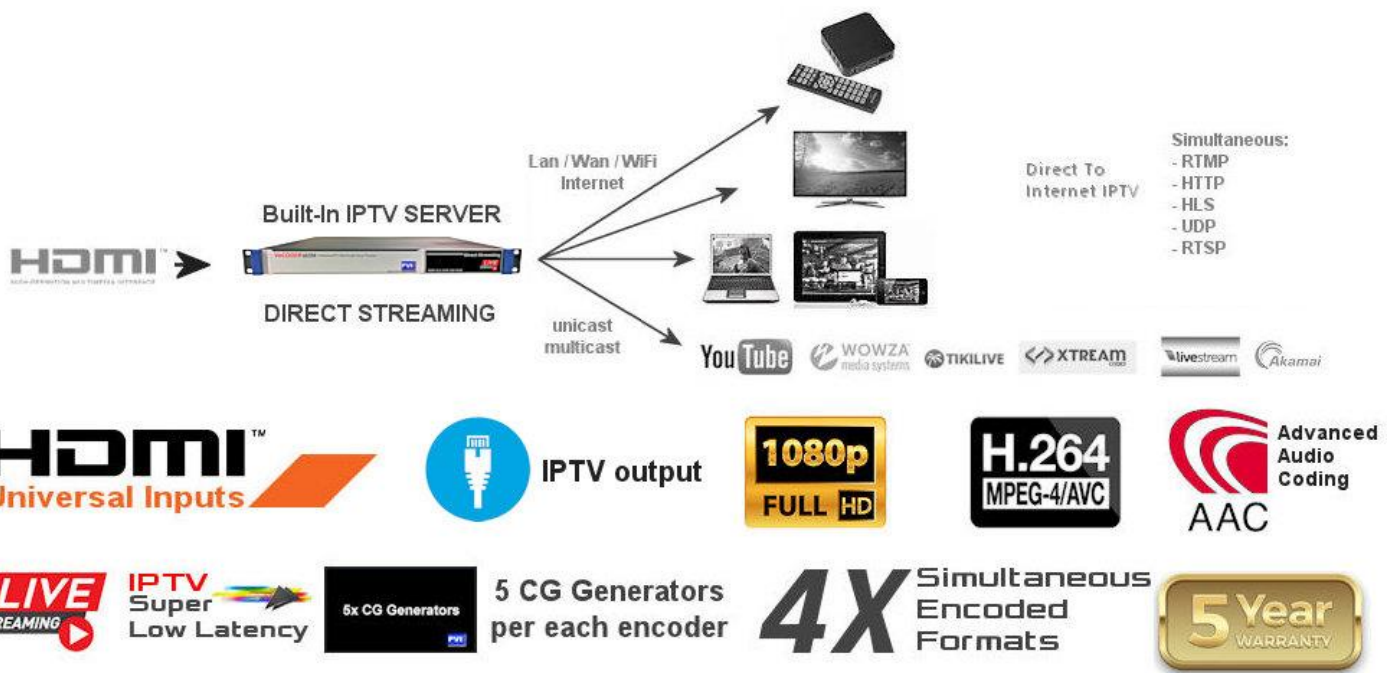
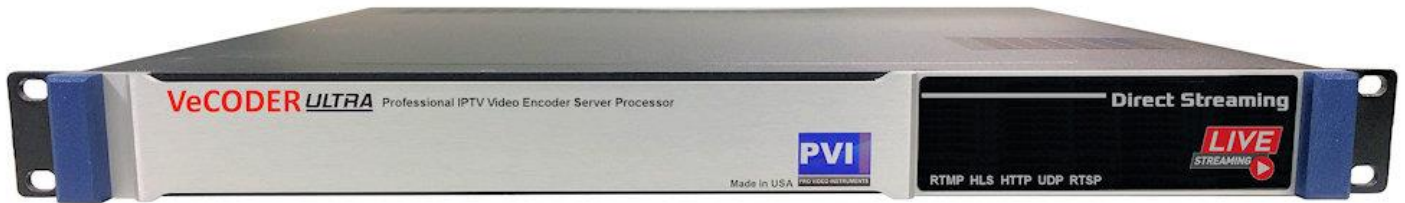




# VeCODER *ULTRA-16* PRO IPTV Streaming

## 16 Channel HDMI IPTV Encoder



### Key Features

- Converts up to Sixteen HDMI Full HD Video sources into 16 IPTV Streams you can watch on unlimited smartTV and IP player Devices
- Works with any HDMI video sources distributing real time perfect quality video & sound over the existing routers, switch, lan, wifi, internet
- Built-In Gigabit IPTV Server for direct HDMI to IP Streaming to SmartTVs Phones Tablets PCs Web - simultaneous HLS M3U8 HTTP UDP RTMP RTSP out
- Each HDMI input channel can also create 4 different resolutions ( multi-rate ) to serve different target audiences and devices
- Four Logo graphic & text inserters per each stream for channel Branding & WaterMarking - Modular - Expandable - Reliable - 5 Year Warranty

## 16 HDMI over IP HD Streaming IPTV Encoder

Real Time Hardware IP Video Encoder, HDMI Licensed, 480i / 720p / 1080i / 1080p Full HD Streaming Server, Mpeg2 AAC AC3 Audio Encoding

Built-In Simultaneous M3U8, HLS, HTTP, RTMP, RTSP IPTV Streaming Server, Four Scalers and Multi-Rate per each channel, Logo Inserters

**PN: VECODER-ULTRA-16**

The VeCODER-ULTRA-IP-16H is a professional Sixteen channels HDMI To IPTV Streaming video encoder, built with the next generation H.264 processors with formats selectable channel by channel, up to Full HD 1080p 60, ideal solution to distribute multiple channels of any HDMI video directly to unlimited SMART TVs, Smart Phones, Tablets, Computers, IPTV Boxes, over LAN, WiFi, Internet.

Based on the newest multi-server multi-format Broadcast chipsets technology, each channel can encode the HDMI Input in FOUR different formats & resolutions, as example for SMART TVs, Mobiles, Tablets, PCs, to fit the destination bandwidth and type of network, with the ability to serve directly hundreds of simultaneous unicast or multicast concurrent players without the need of additional parts or servers.

Each channel can also load & inject up to Five Graphic Logos or Texts for channel identification, Watermarking, Info, QR Codes for commercial links, etc.

The VeCODER delivers incredible video quality and power as each channel comes with its own encoding engine, served over multiple Full Gigabit speed outputs, able to support very high traffic demand on the same channel.

The VeCODER connects directly to the existing LAN Switch, or wifi, or internet router and streams the HDMI Video input in super ultra low latency to any device, perfect also for Live Applications.

The encoded channels can also be sent directly and simultaneously to any additional distribution servers as YouTube, Wowza, Akamai, and any other, to reach even more audience, unlimited.

In Homes, Commercial, Hospitality, a single VeCODER can play directly on any SMART TV over wired Lan or Wifi, without need of any additional part behind the TV - Direct.

Multiple VeCODERS can be installed at the same time on the same distribution network, anywhere, adding and expanding the available IPTV Channels at any time.

Available in 4, 8, 12, 16 channel configurations, the VeCODER-ULTRA-IP is the perfect solution for any professional Over IP Video Broadcasting and Distribution, where Total Video Quality, Performances, Reliability, and best cost per channel are most wanted.

# VeCODER **ULTRA-16**

PRO IPTV Streaming

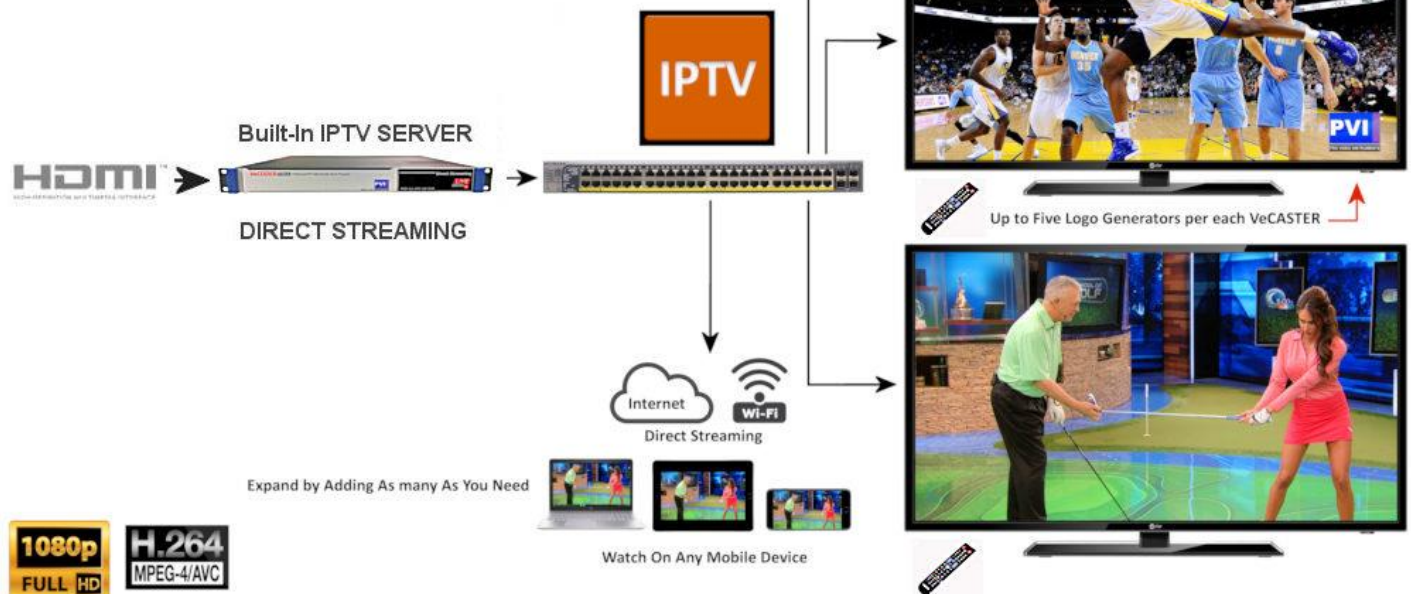


## HDMI Over IPTV Distribution

- Easy Installation - Perfect Full HD Quality
- 16 HDMI Video Sources - Unlimited Televisions
- Real Time - Any Network - Direct Streaming

Direct Streaming to Any Smart TV - No IP Box

**ADD More Units for unlimited channels**



## Features & Benefits

- LIVE HDMI Video distribution over the existing IP Networks to an unlimited number of TV & IPTV Players
- Direct To SmartTVs m3u8 installing on the SmartTV any of the many available SmartTV IPTV Apps
- Direct To Any IP Box in both multicast and/or unicast via any protocol such as udp rtp rtsp m3u8 rtmp http hls
- Direct To Iphones Ipads Galaxy Android HLS play direct from the device browser no app required
- Direct To PCs using any Windows Mac Linux video player such as VLC, Media Player, Kodi, and similar
- Direct To Internet using the existing router with a public ip
- Direct To YouTube to stream live TV & Radio channels to millions of users with or without login
- Direct To FaceBook, YouTube Red, Wowza, Akamai, and any other media server with token, login, any ADVANCED EDID control to manage any video source automatically
- Built-In COLOR BARS HD reference signal for installation and in case of input video loss
- Sixteen Simultaneous HDMI video sources to Sixteen simultaneous IP Streaming out distribution in a box

- HDMI digital-perfect quality streaming at any distance up to 1080p 60 Full HD
- Any HDMI Resolution including SD / HD / and typical Computer ones
- Frame Rate Encoding Control per each channel, from 1FPS to 60 fps
- Independent Video Scaler per each channel, to resize the video input to any resolution out for any specific Target Audience
- Real Time Super-Fast processing for Live Real Time Applications
- Licensed HDMI inputs - works with any HDMI Video Source
- Simple installation and operation over any existing switch / router / network via computer and secure login Web Interface
- Add Multiple units for more channels by setting different IP addresses per each unit
- Selectable Audio Format per each channel including Dolby Digital AC3, Mpeg1L2, AAC
- CC Closed Caption compatible via HDMI cable / active on the native HDMI
- ALL-STREAMING MODES are built-in and can be activated channel by channel at same time as:  
M3U8 / HLS / RTMP / RTSP / HTTP / UDP / ONVIF
- Built-In Multicast - Unicast Multi-Gigabit server for direct streaming to hundreds of players on LAN / WIFI / WEB.
- Low Latency is standard - UDP streaming is Real Time Live-Like - <50 milliseconds HDMI input - to - IP Output
- Broadcast Video Encoding processors for the ultimate video quality and the lowest bandwidth today possible
- Stream Descriptors control to edit Programs Names, PIDs, Channel Numbers, Descriptors
- Modular Design for total reliability, zero down-time, expandable, manageable, flexible.
- Compact Dimensions & Quiet/Silent Operation fits in every application, anywhere
- 5 Year advanced warranty - Offers advanced replacements of modules to receive and replace on-site - zero downtime\*
- Simple Installation, For Everyone, Anywhere, In Minutes, For the Best Price on the Market

# **VeCODER** *ULTRA* **PRO IPTV Streaming**

## **HDMI IPTV Encoder**



SIMULTANEOUS M3U8 + HLS + RTMP + RTSP + RTP + HTTP + UDP



**any IPTV APP**



- Samsung SMART TV
- TIZEN
- LG Smart TV
- LG webOS
- amazon fireTV
- androidtv

**Any Format / Any Network**  
**Anywhere**



## TECH SPECS GENERAL

<b>Model Name</b>	VeCODER ULTRA-16 HDMI
<b>SKU</b>	0649070905756
<b>Power</b>	100-240 VAC 50/60 Hz, 60W max. 30W Typical IEC 60320-C14
<b>Cooling</b>	Dual internal cooling fans with Front inlet and Sides exhaust
<b>Fan dB level</b>	<20db Super Quiet Operation under normal conditions
<b>Temperature/Humidity</b>	+32 F° to +115 F° ( 0 C° to +46 C° ) / 10% to 80% non-condensing
<b>Vibration</b>	NSTA 1A in carton
<b>MTBF</b>	55,000 hours
<b>Compliance</b>	FCC Class A, IEC60065, EN61000, CE, RoHS, RCM C-Tick
<b>Enclosure Type</b>	EMI Shielded Metal
<b>Mounting</b>	In-Rack Mounting with 19" Rack Ears adapters included, 1RU high
<b>Enclosure Dimensions</b>	1.72 in. (H) x 19 in. ( front external rack ear to ear dimension ) x 12.5 in. (D)
<b>System Weight</b>	12.47 lbs. (5.6 kg)
<b>Carton Dimensions (Individual)</b>	4.25 in. (H) 30.875 in. W 14.015 in (D); 108 mm (H) 785 (mm) W 356 (mm) (D)
<b>Shipping Weight</b>	15.1 lbs. (6.85 kg)
<b>Warranty</b>	5 years
<b>Reliability</b>	Modular Cards for zero downtime 24/7 Operation
<b>System Maintenance</b>	Modular Design allows on-site replacement of any encoder processing board card without removing the system from site

## INSTALLATION

<b>Remote Control</b>	Via PC and provided Management Software
<b>Simple Setup</b>	Simple configuration via Login-Protected Web Interface
<b>IPTV Networks</b>	Built-In Multi-Gigabit IPTV Server to drive directly any LAN, WIFI, INTERNET, with M3U8, HLS, RTMP, HTTP, UDP, RTSP
<b>HDMI Inputs</b>	Licensed HDMI inputs compatible to any HDMI Video source
<b>Multi-Units</b>	Multiple units can be used on the same network for more channels, by simply configuring different IP Addresses per each machine

## VIDEO INPUT

<b>HDMI</b>	16 ports of Licensed HDMI input - compatible to any HDMI Video Source up to 1080p resolution
<b>HDMI Version</b>	Compatible to any HDMI source including HDMI 2.0 ( Max input resolutions 1080p 60 )
<b>EDID Control</b>	Advanced EDID Auto control compatible with any HDMI Video source
<b>AUTO Detection</b>	Auto frame-rate input switching
<b>CC Closed Caption</b>	Digital In-HDMI CC video pass
<b>Video Resolutions</b>	480i / 480p / 576i / 576p / 720p / 1080i / 1080p ( AUTO EDID or Selectable SCALER per channel ) Sub Resolutions and PC Resolutions are also supported on both HDMI Inputs and the Target Encoding
<b>Frames Ratio</b>	1 to 60 FPS selectable stream by stream
<b>Aspect Ratios</b>	16:9 / 4:3 / Film mode detection (3:2 pull-down)

## AUDIO INPUT

<b>HDMI AUDIO</b>	Any HDMI Embedded Digital Audio
-------------------	---------------------------------

## COLOR BARS

<b>TEST GENERATOR</b>	Built-In Broadcast HD Test Pattern Generator for plug 'n play installations and input signal lost detection
-----------------------	---

## VIDEO ENCODER

<b>Encoder Video Profile</b>	- Selectable per each HDMI / per each of the 4 Multi-rate sub stream - MPEG4 H.264 base profile / main profile / high profile - any level
<b>Encoding Mode</b>	Interlace & Progressive encoding support
<b>Video Processing</b>	Extensive video pre-processing help get the best picture whatever the source
<b>Processors Per Channel</b>	Broadcast Encoder Chipsets for maximum Quality
<b>Video Processing</b>	Extensive video pre-processing including Noise reduction and Resolution changing
<b>Encoding In-Out Latency</b>	<50 milliseconds HDMI input to IP out in udp mode - <u>Excluded player buffering</u>
<b>Traffic Shaping</b>	Selectable Triple Motion Estimation Look-Ahead Statistical Variable Bitrate or Constant Bitrate
<b>Video Encoding Data Rates</b>	VBR Variable, 64Kbps 15Mbps per channel
<b>Color Profile</b>	4:2:0 Broadcast Grade Sampling
<b>GOP Size</b>	15
<b>PCR Precision</b>	Broadcast-Grade Accuracy

## AUDIO ENCODER

<b>Channels</b>	1 x stereo audio channel processing
-----------------	-------------------------------------

<b>Audio Formats</b>	- Dolby Digital® (AC-3) - Encoding rates from 56 kbps to 640 kbps - MPEG-1 Layer II Audio Encoding Standard Encoding rates from 32 kbps to 384 kbps - AAC Advanced Audio Coding - MP3 Audio Encoding
<b>Audio Video Sync</b>	Automatic Audio Video frame by frame synchronization with Time Stamp
<b>TRANSPORT STREAM</b>	
<b>PIDs Numbering</b>	Full Control to match any specific Network Provider or application Needs
<b>Descriptors</b>	Full Control to set Programs Names / Network / Provider
<b>CONTROL SET UP</b>	
<b>NETWORK</b>	In-Band Ip web remote control via secure login
<b>AUTOMATION</b>	
<b>Integrations</b>	Compatible with any Automation, set channels numbers and names, auto-detects formats & resolutions changes on the fly. Then Usually the Automation controls the sources and the destination TVs to select the channel to watch as there is no need to change the encoder settings at any time. Easy To Install, Simple to Operate, Reliable, Cost-Effective, Real-Time with no maintenance required.

## Pro Video Instruments Corporation USA

7022 TPC Driver – Orlando FL – 32822 – United States Of America

Phone +1.407.720.6101 Fax +1.407.720.6105 Tech Support +1.407.720.6101 #2

[info@provideoinstruments.com](mailto:info@provideoinstruments.com) [www.provideoinstruments.com](http://www.provideoinstruments.com)

