

# VeCOAX-XP

WALL MOUNT & DESKTOP

## Compact Multi-Channel FULL HD Video Modulators



DVB T HD  
DVB C HD  
QAM HD  
ATSC HD  
ISDB T HD



**HDMI**<sup>™</sup>  
HIGH DEFINITION MULTIMEDIA INTERFACE



**Turn your HD Video Signals into a real digital RF and broadcast to all of your HD TVs via the antenna coax cable**

- ✓ *Desktop Compact SDI or HDMI Full HD Digital Video RF Modulator*
- ✓ *Available with single / dual SDI or HDMI Simultaneous Channels*
- ✓ *1080p / 1080i / 720p Full HD Resolution*
- ✓ *Triple Pass Pro Video Encoding – Outstanding HD Picture - same as the original*
- ✓ *Silent & Cold operation - installs anywhere in any room*
- ✓ *Built-in Self Adaptive RF Mixer – perfect distribution on your Coax Cables*
- ✓ *RF out for DVB-T – DVB-C – US Clear QAM – ATSC - ISDB-T*
- ✓ *HD-SDI / HDMI / HD Component / CVBS input models available*
- ✓ *Can also be DC operated for portable/mobile applications*
- ✓ **5 YEARS of warranty & Breakthrough Price !**



# Your HD Signals Everywhere – Simple & Easy

## Easy 1080p HD Video distribution to unlimited TVs via the Antenna Coax Cable



### Simple Distribution via the Antenna Cable

Based on the DVB/ATSC Broadcasting technologies, the VeCOAX-XP converts your HDMI, DVI Video Signals into a real digital TV frequency you can inject straight to the local antenna wall-mount socket, so all the TVs connected to the same coax cable will receive it as it would be just another standard HDTV program.

### HDMI Inputs for the BEST FULL HD PICTURE QUALITY

VeCOAX-XP does not compromise with your quality of picture, thanks to its broadcast-grade processor that captures and distribute your Full-HD contents with almost no-delay and no flaws, perfect on Sports, High Motion Video, Text Crawls in Digital Signage, and any other content.

### Connects to any Video Source

VeCOAX-XP can be connected to any HDMI or DVI full HD video source. HDMI inputs makes this converter suitable for pro applications where perfectness of HD Picture Quality is most wanted.

### Simultaneous RF + IP Streaming + ASI outputs

VeCOAX-XP comes standard with simultaneous RF + IP Streaming + ASI outputs, enabling the simultaneous distribution to any network

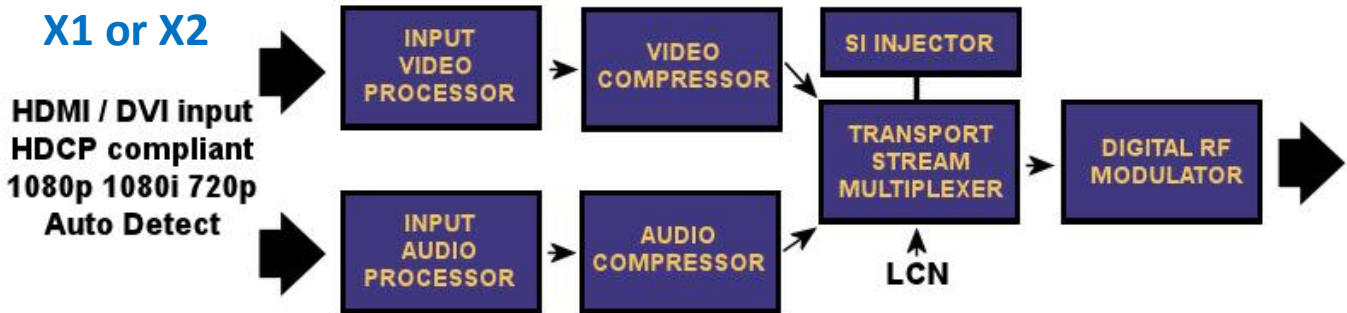
## At a Glance

- ✓ 1 or 2 HDMI inputs
- ✓ 1080P / 1080i / 720p Full HD
- ✓ Compact Dimensions  
Wall Mount & Desktop
- ✓ Noiseless & Cold operation
- ✓ Pro Connectors & Components  
for Non-Stop operations
- ✓ AC & DC operable
- ✓ DVB-T / DVB-C / US QAM /  
ATSC / ISDBT RF Out Models
- ✓ VHF/UHF out with LCN/VCT
- ✓ ASI in / out with remux
- ✓ Simultaneous IPTV Stream out
- ✓ Services Descriptors editor
- ✓ Also WEB Remote Control
- ✓ Mix to the existing antenna  
coax together with other  
Adjacent TV signals
- ✓ 5 Years of warranty
- ✓ **Best price & Quality**

# The Perfect HD Picture quality you want



BLOCK DIAGRAM



## Save on Cables & Adapters

*VeCOAX-XP does not need any additional set top box, nor adapters, extra cables and power supplies on each TV in every room, since it distributes your Full HD Video via the common antenna cable. You'll be able to switch between your new HD channels and any other standard received channel just using the original TVs remote control.*

### TRUE HD - Home Entertainment

VeCOAX-XP is the perfect solution to distribute all your HD Video Sources from your Master room to all your TVs in all other rooms, without the need to duplicate the AV equipment to each room. Our IR Infra-Red Extender option allows infrared remote control feedback from any room to the master AV system via the same Coax Cable.



### Hotel TV

VeCOAX-XP is the Perfect Solution to create unlimited HDTV channels in any Hotel Environment and distribute these to standard HD TVs in every room via the existing Coax Cables. Digital Signage, Info Channels, Meeting channels, and any other video taken from any HD / SD Video source.



### And any other..Unlimited Applications :

HD entertainment, HD surveillance, Private Homes, Condominiums, Sport Bars, Restaurants, Lounges, Clubs, Discos, Resorts, Hotels, Malls, Convention Centers, Race Tracks, Hospitals, Airports, Theaters, Live Events, Motor Yachts, Cruise Ships, Corporates, Schools, Campus, In Store TV, HDTV Distribution, Info Channels and Digital Signage, Low Delay full HD Monitoring, Coax Broadcasting, and yours...



## Key Benefits

- ✓ 1 or 2 Channels in a very Compact & noiseless unit
- ✓ No Needs to wire new cables as it shares the existing antenna coax cables, easy
- ✓ Direct reception on any Existing HD TV without the need of any extra adapter
- ✓ Drives up to 1600 Feet (500+ meters) of existing coax cables without the need to Re-Amplify.
- ✓ **HDMI input for TRUE FULL DIGITAL Full HD picture quality and resolution**
- ✓ **Pro Connectors & Components for Non-Stop operations**
- ✓ **5 YEARS of warranty**
- ✓ **Expandable with Multiple units chaining**
- ✓ **USA and Europe Technical centers for the best world-class Free tech support and services**

# The Perfect choice, Reliable & Affordable



The VeCOAX-XP is available with different RF output standards for every world-wide country, and is compatible to any HD TUNER TV set. It connects in minutes to your HDMI video sources and the existing Antenna Coax cable distribution system so the created HD programs can be received by any connected HD TV, just rescanning the frequencies, easy.

**5 YEARS of warranty through our World-Class Free Tech Support centers in USA and Europe**

## Video Input

### Standard Video Input Interface

#### HDMI

- HDMI 1.4 Full HD Input fully supported  
36-bit color depth  
1080p / 1080i / 720P Resolutions  
59,94 / 50 Frames/Fields
- HDMI Audio Stereo/Surround
- Number of inputs depends by model

#### Computer DVI

- DVI Digital via DVI-HDMI Cable
- VGA/XGA/SXGA/WSXGA/UXGA
- 59,94 / 50 Frames/Fields
- Audio requires hdmi embedder box

### Optional alternative input interfaces

#### HD-SD SDI ( option -SDI )

- 3G-SDI SMPTE 425
- HD-SDI SMPTE 259M
- 1 stereo audio pair embedded

#### HD-SD COMPONENT ( option -CM )

- YPbPr
- 1080p/1080i/720p HD formats
- 576i / 480i SD formats
- One stereo L/R unbal audio in

#### SD AV ( option -AV )

- Composite CVBS video input
- 576i / 480i formats
- One stereo L/R unbal audio in

## Audio Input

### Standard Audio Input Interface

#### HDMI

- HDMI Audio Stereo/Surround

### Optional alternative input interfaces

#### HD-SD SDI ( option -SDI )

- 1 stereo pair embedded

#### HD-SD COMPONENT ( option -CM )

- One stereo L/R unbal audio in

#### SD AV ( option -AV )

- One stereo L/R unbal audio in

## Video Encoders

### Video Encoding profiles per each channel

- Mpeg-4 H.264 AVC
- HD HP@L4 High Profile @ Level 4.0  
1920x1080i, 1280x720p  
( not available for CVBS AV models )
- SD HP@L3 High Profile @ Level 3.0  
576x720i, 480x720i  
(not available for HDMI input models)
- RF Out follows the original input resolution

### Compression Modes per each channel

- Broadcast-Quality Hierarchical motion estimation
- VBR Statistical Multiplexing
- Also CBR Mode
- 0.3 Mbps to 20 Mbps\*
- User defined Program Name, Service Provider, program number, and other information
- User defined PIDs

### Dual Channel Model

- On dual channel model, two simultaneous programs can be encoded, each with different parameters.

Possible combinations are :

HD-HD = dual HDMI inputs  
SDI-SDI = dual SDI inputs  
CM-CM = dual YPbPR ins  
AV-AV = dual CVBS inputs

As well any mix combination as

HD-SDI = HDMI + SDI inputs  
HD-AV = HDMI + AV inputs  
etc..

### Mpeg-2 HD Encoding ( option -MP2 )

- Adds the ability to encode the video to the legacy mpeg-2 HD video format

## Audio Encoder

### Audio Encoding profiles

- Mpeg-1 Layer II – All Modes
- Surround pass-through

### Optional Audio formats

- AC3-Stereo ( opt- AC3 )
- AAC-LC ( opt-AAC )

## ASI i/o & Remuxing

### ASI input

- 1x ASI Burst/Byte 188/204 Transport Stream Input
- Accepts any MPTS ( multi program transport stream ) or SPTS ( single program transport stream )
- Rates up to 214 Mbit/s

### Remultiplexing

- Decoding of the Services information from the ASI input
- Ability to “ REMUX “ selected DVB services ( programs ) from the ASI input to the ASI/IP/RF outputs, together with the generated new programs from the video inputs.
- Complete management of PIDs, Service provider/s, Service Names, manual or automatic PIDs remapping or pass-through, PCR correction, EMM/ECM cas and DSMCC PIDs and descriptors pass-through, etc.

### ASI output

- 2x ASI Burst/Byte 188/204 Transport Stream Outputs
- SPTS output of the single encoded video service, or MPTS of the dual encoded channels and the sum of the external incoming ASI / Selected pids and/or services
- Rates up to 214 Mbit/s

# Specifications

## RF Modulator Out

### DVB-T Version ( version T )

- DVB-T Standard DVB ET300744
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- Channel Bandwidth : 6/7/8 Mhz
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- MER: Professional-Grade >47 dB
- Spectrum Shoulders: 55 dB for perfect adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- DVB-T modulations: QPSK, 16QAM, 64QAM
- FFT: 2K / 8K mode
- Guard Intervals: 1/4, 1/8, 1/16, 1/32
- Code Rates: 1/2. 2/3. 3/4. 5/6. 7/8

### DVB-C Version ( version C )

- DVB-C Standard DVB ET300429
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- - ITU-T J.83 A/C (Europe/Japan)
- - 16/32/64/128/256 QAM
- Any MegaSymbol

### CLEAR QAM North American ( version Q )

- ITU-T J.83 Annex B QAM-B
- PSIP descriptors edit and Injection
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- - 64/256 QAM
- Any MegaSymbol

## RF Modulator Out

### ATSC 8VSB ( version A )

- North American ATSC 8VSB
- PSIP descriptors edit and Injection
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- Out Filter: -70 dB of Harmonic and spurious suppression

### ISDB-T ( version i )

- ISDB-Tb South American
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and

## IPTV Out

### IP Streaming out

- MPTS IP Streaming out
- Simultaneous to RF out
- Ideal for Wifi and Lan Simulcast
- UDP Multicast with full IGMP support
- Unicast up to 90 Mbit/s of requests.
- Complete config of network param.
- Compatible with any IP Set Top Box, Video player software, VLC, etc.

## Control

### Full Local Control/Setup

- Instant Access to all fetures from the local Keyboard and Large Display, without the need for a PC.

### Remote Control

- Via standard Web Browser from any PC, with security Login.

## Warranty

Warranty - 5 Years Registering the product

## Physical and Power

**Power** - 90 to 240 VAC 50/60 Hz - 25 Watts

**Cooling** - Fanless - Noiseless

**Max Dimensions** 490x300x44.5 millim.  
(19.2 x 11.9 x 1.75 inches)

**Weight** - 6,5 Kilograms ( 14,3 lbs )

**Operating Temperature**

-10°C to 50°C (14°F to 122°F)

**Relative Operating Humidity**

10% to 90% (Non-condensing)

**Compliance**

EN55022, EN61000-3-210, EN61000-3-310, EN55024, CISPR22, EN60950-1, IEC60950-1, UL60950-1, UL60065, FCC Class B

## Ordering Information

**VeCOAX-XP1x-HD-y single channel hdmi**  
**VeCOAX-XP2x-HD-y dual channel hdmi**

**x = RF Output option**

**T for DVB-T RF out**

**C for DVB-C RF out**

**Q for J.83-B US Clear QAM RF out**

**I for ISDB-Tb RF out**

**A for ATSC 8VSB RF out**

**additional Options**

**y = Add special option list as follows**

**Video Options**

- **MP2** changes encoding to MPEG2 HD

**Input Options**

- **SDI change 1 input to HD SDI**

- **DVI changes 1 input to DVI and Audio**

- **VGA changes 1 input to VGA and Audio**

- **CVBS changes 1 input to CVBS / Audio**

- **AV change the input to AV SD mpeg2**

- **CM change the input to HD/SD YPbPr**

more inputs can be changed adding

multiple options on part number

example : vecoax-xp2t-hd-sdi

this is 1x hdmi + 1x sdi dual channel

**Audio options**

- **AC3** adds AC3 Stereo compression

- **AAC** adds AAC Stereo compression

**IR Extenders**

- **IR MASTER** – first IR TX + Master RX

- **IR ROOM** – additional IR Room TX

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