

# BROADCAST VIDEO ENCODING SYSTEMS

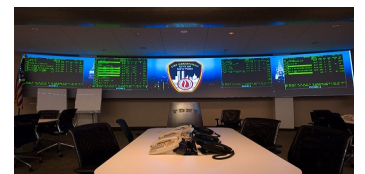
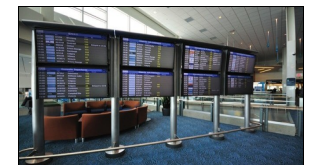
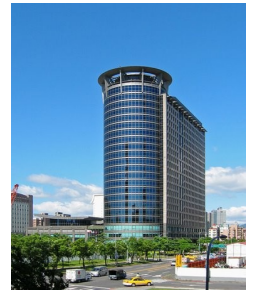
Video Encoding TV Modulation- CREATE Your Own CATV QAM Cable or off air ATSC Channel

- HD MPEG2 and H.264 Encoder & Modulator
- Encode Latency 70ms
- Up to 4x HD-SDI Inputs
- Up to 4x HDMI Inputs
- 1-4 CATV RF QAM output
- QAM or ATSC (8VSB) or DVB-T
- IPTV Output
- ASI output
- ASI Input for TS multiplexing



## Applications :

- Hotels
- Hospitality
- Digital Signage
- Education
- Worship
- Concert Halls
- Stadiums
- Arenas
- Malls
- Live Events
- Airports
- Campus
- Surveillance
- Corporate



# How to choose the right QAM-IP chassis for you in

## 4 easy steps:

### 1. Choose any INPUT



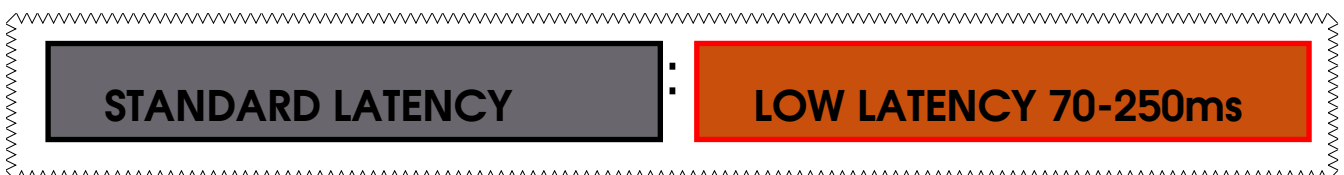
### 2. Choose a Modulation



### 3. Choose how many Channels:

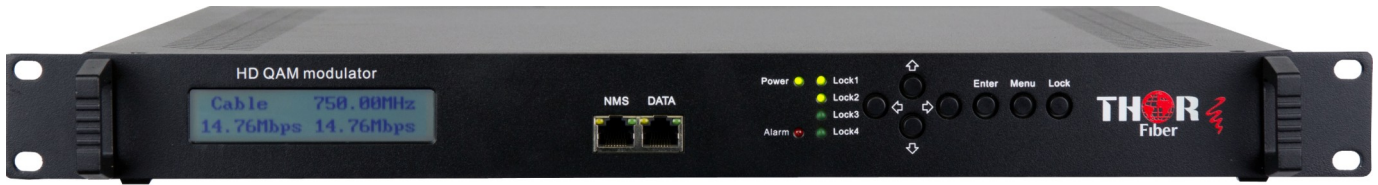


### 4. Choose Latency



# ANY VIDEO SOURCE TO CATV RF, IP, ASI - QAM / ATSC / DVB-T

## 1-4 HD MPEG2/H.264 ENCODER + RF DIGITAL MODULATOR



- 1-4 HD VIDEO over Coax CATV RF distribution QAM or ATSC or DVB-T or S2
- 1-4 HD Video IPTV Encoder -MPEG2 or H.264 (IP Ethernet Output)
- 1-4 HD Video Contribution ASI Encoder MPEG2 or H.264 (ASI Output)
- SDI to RF
- SDI to IP
- ASI Multiplexer
- ASI cherry picker
- ASI to IP converter

**SDI IN**



**COAX RF OUT**

# HD/SD-SDI OPTIONS

### 1 SD/HD-SDI INPUT

H-1SDI-XX-IPLL



### 2 SD/HD-SDI INPUT

H-2SDI-XX-IPLL



### 4 SD/HD-SDI INPUT

H-4SDI-XX-IPLL



### 1 SD/HD-SDI +1 HDMI

H-1SDI-1HDMI -XX-IPLL



### 1 SD/HD-SDI +1 HDMI

H-1SDI-1HDMI -XX-IPLL

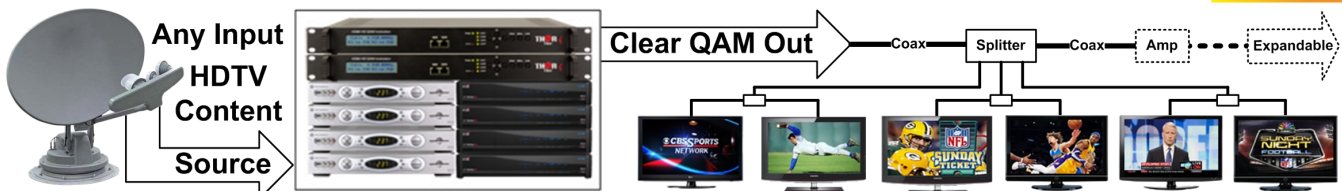


### • Conversions : SDI to RF, SDI to IP, SDI to ASI

- SDI Support : 720p/1080i/1080p60
- Create any 1-4 CATV RF TV channel—45-1000Mhz
- 4 Programs on 1 CATV channel available
- RF Output : QAM-256/64 or Firmware for ATSC,
- DVB-T, DVB-S2 Available
- IPTV Output Unicast or Multicast IGMP UDP
- ASI TS Input for internal Ts multiplexing
- ASI Output with multiplexer cherry picking program
- Low Latency available 70-120ms available
- Dolby AC3 Audio available (AC3 model)
- MPEG2 Video or MPEG4 H.264 Encoding
- Front Panel LCD local control



**IPTV OUT**



# CREATE YOUR OWN RF CHANNELS

Encode, Modulate, Mux, and Distribution

# HDMI OPTIONS

HDMI IN



ALL in 1

4 HDMI INPUT

4 YPbPr (Component)

4 CVBS (Composite)



1 HDMI INPUT

H-HDMI-XXIPLL



2 HDMI INPUT

H-2HDMI-XX-IPLL



4 HDMI INPUT

H-4HDMI-XX-IPLL



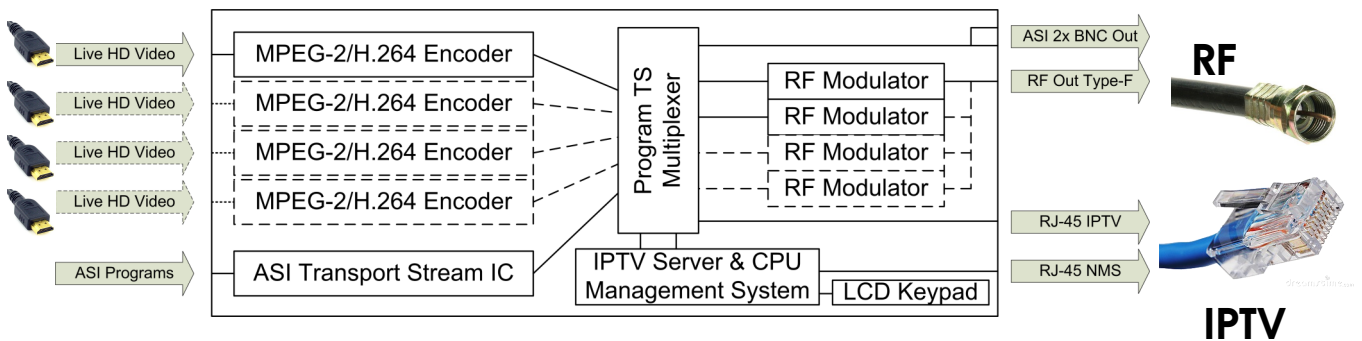
2 HDMI + 2 YPbPr

H-2HDMI-2YPBPR -XX-IPLL



4 RGB- ( 4 YPbPr )

H-4YPBPR -QAM-IPLL



Conversions : HDMI to RF, HDMI to IP, HDMI to ASI

: YPbPr to RF, YPbPr to IP, YPbPr to ASI

- Hot swappable - SDI Card, HDMI , YPbPr Card.
- Secondary HDMI input will automatically switch if video on primary inputs fail to be detected on single channel and dual channel chassis only
- Supports real time HD encoding for both MPEG-2 or H.264 codec's with multiple audio formats including Dolby AV3
- Configured and monitored via any standard web browser with secure password protected login
- Easy tech support via web and phone
- Low Latency is the ideal solution for Live Sports, Concerts, Event Halls for real time encoding at 70ms
- HDCP Comply , It will work with any DVD player or any STB

# LOW LATENCY 70MS ENCODER MODULATOR CC

Ultra Fast Source to Display Digital Channel Modulation

ALL in ONE—HDMI / YPbPr to CATV RF/IPTV/ASI

Low Latency 4CH Encoder Modulator with separate analog CC input



- 4 HDMI INPUT
- 4 YPbPr (Component) INPUT
- 4 CVBS (Composite) INPUT
- 4 CC (closed caption ) INPUT
- 4 Analog Audio inputs INPUT
- ASI INUT
- 1-5 RF CATV QAM OUPUT
- IP OUTPUT UDP /RTP Unicast or Multicast
- ASI OUPUT
- MPEG2 or H.264 Video Encoding
- MPEG1, MPEG2 or Dolby Audio Encoding
- Ultra Low Latency 7—200ms
- QAM or ATSC or DVB-T or - (firmware depend)
- NMS IP control
- LCD Display front panel control
- 19" Rack mountable
- HDCP Comply

# DIGITAL HDTV - ENCODER / CATV MODULATOR

## VQAM SYSTEM - COMPACT LOW COST COAX DISTRIBUTION

H-VQAM-SD:

### 1 CHANNEL CVBS ENCODER HDTV QAM or ATSC MODULATOR

- 1x SD CVBS In
- 1x Digital TV Ch
- QAM or ATSC



- 1 Channel MPEG-2 encoding with full PSIP & EPG data generation with PID mapping for QAM or ATSC
- Modulates standard definition (480i) digital TV channel in either Cable (QAM) or Free to Air (8VSB)
- Digital TV channels do not degrade with coax distance or require RF level adjustments, true DTV

H-VQAM-HD , H-VQAM-ATSC:

### 1 CHANNEL COMPACT HD HDMI, YPbPr, CVBS ENCODER HDTV MODULATOR



- 1x HDMI Input
- HDCP Comply
- 2x Component
- 1x HDTV RF Channel
- QAM or
- ATSC or
- DVB-T

- QAM or ATSC
- DVB-C , DVB-T

- 1 Channel MPEG-2 or H.264 encoding for broadcast video from HDMI or Component inputs up to 1080p60
- 1 Channel MPEG-2 encoding with full PSIP & EPG data generation with PID mapping for QAM or ATSC
- Same high quality encoding system found on more advanced feature QAM-IP series of encoder modulators

# DVB-S2 SATELLITE ENCODER MODULATORS

Any HD video format Input—RF Satellite L-band DVB-S2 Output

## Live HD Video Encoder + Modulator



**Email: [Sales@thorfiber.com](mailto:Sales@thorfiber.com) Call 1(800)521-THOR(8474)**

- Digital Video Broadcasting: Satellite RF output. Encoder with Uplink
- Thor Broadcast streams HD digital video Encoder to DVB-S RF output
- Video Encoder with Uplink Satellite Modulator for DVB-S2 RF output
- Single card chassis encoder multiplexer modulator system.
- Process signals up to full HD 1080p60 frame rates MPEG2 or H.264
- Audio encoding is based on embedded PCM input in the SDI video stream
- Audio Available codecs include MPEG1 Layer 2, MPEG2-AAV, and MPEG4-AAC
- Customizable encoder cards: HD-SDI, HDMI, RGB, & CVBS