

H-HYBRID-RF-8

8 channel HDMI and SDI Clear CATV RF Modulator QAM, ATSC, DVB-T, ISDB-T



Sophisticated and Spectacular Universal Modulator that's unique design is the most capable Hybrid on the market. Up 8 Channels of HDMI or SDI inputs allow you to select either or in the options menu on the simple and creative GUI. This modulator by Thor has independent input cards for flexibility for Digital Modulation because it eliminates the need for HDMI to SDI or SDI to HDMI converters. Simply select which source you want to use and input the channel frequency creating an automated encoding headend device that can clean up your headend and modulation distribution infrastructure.

Each channel can individually be selected as an HDMI or SDI input, it could be switched on the fly using front panel buttons or Thor's dynamic proprietary Web interface. Each of the 8 channels of RF output can be set totally independent as a frequency AND modulation standard. For example, you can input 4 channels as HDMI and set to QAM output and then input 4 channels of SDI and as ATSC output. This is a flexibility that hasn't been seen before on the market creating a whole new generation of standard for encoder modulation products

The New THOR HYBRID Modulator has an NMS port and LCD display with simple D-Pad buttons for control and easy setup on the fly. It includes and supports the majority of Modulation standards found in the world; like Clear QAM Annex A and Annex B, ATSC-8VSB, DVB-T, and ISDB-T. The Hybrid modulator support MPEG2 video encoding up to 25Mbps/channel, Audio AC3 or MPEG1 Layer 2, and AAC, Thor's world-famous Low Latency, and VCT -Virtual Channel Numbers for increased flexibility. Each CATV RF channel can be set individually, so it does not have to be in a linear 8ch block, feel free to spread out your new custom RF channels all over the existing RF spectrum in your modulation lineup.

Features

- 8 Independent HDMI and SDI Inputs (individually selectable for each of the 8 channels you can output)
- HDMI is HDCP compliant for use with any source
- Outputs 8 separate Clear CATV RF channels QAM / ATSC 8VSB / DVB-T / ISDB-T (selectable in the GUI)
- RF output on each of the 8 RF channels can be individually set to a frequency and modulation standard (2 on QAM, 3 on ATSC, 4 on ISDBT, etc)
- DVB-C Annex A and B QAM 64, QAM 256
- Supports full HD video up to 1080p/59.94/60, other resolutions included are 1080i, 720p, 480i also supported
- Low Latency supported; 3 different latency settings 100/500/1000ms
- Video encoding rate up to 25Mbps
- MPEG2 Video Encoding
- Dolby AC3 and MPEG1 Layer 2, & AAC audio encoding
- VCT Virtual channel number and Name supported
- Frequency 50Mhz to 900Mhz
- NMS web interface controllable
- Easy to use web Gui Interface (setup and status)
- LED's Status on front panel shows HDMI in blue or SDI in green for easy to see video detect link
- LCD Display and front panel control buttons for setup, control and status
- Powerful processing with the best MPEG2 video encoding chip
- First High Density HDMI and SDI input modulator on the market
- Lowest cost per channel in perfect HD resolution for any application from Live Sports, House of Worship, Concerts, Theatres, Malls, Airports, Hotels, Military, Private Enterprise



Specifications

| Input | 8x HDMI Inputs and/or 8 x HD/SD-3G SDI Inputs | | | | |
|------------------------------|--|--|--|--|--|
| Supported Resolutions | 480i 1280x720P 60 / 59.94 / 50 Hz 1920x1080I 60 / 59.94 / 50 Hz 1920x1080P 60 / 59.94 / 50 Hz | | | | |
| Video Codecs | MPEG-2 HD: 1.5 - 24 Mbps | | | | |
| Audio Codecs | MPEG1 Layer 2 Encoding AAC Encoding AC3 Dolby Encoding | | | | |
| Audio Sample Rate | 48 kHz | | | | |
| Audio Bit Rates | 64 kbps, 96 kbps, 128 kbps, 192 kbps, 256 kbps, 320 kbps | | | | |
| Modulation Standard | 1) DVB -C QAM - J.83B, J.83B, QAM 64/256, (US Cable) 2) DVB -C QAM - J.83A, QAM 16/32/64/128/256, (European Cable) 3) ATSC - Constellation 8VSB (US Off Air TV) 4) DVB-T (European Off Air TV) 5) ISDB-T (Latin America Off Air TV) | | | | |
| RF Frequency Range | 50 Mhz to 950 MHz 1 KHz Step | | | | |
| RF Power Level | 5 - 35 dBmV Adjustable | | | | |
| SDI Input | 8 x BNC Connector, support SD-SDI, HD-SDI and 3G SDI Input | | | | |
| HDMI Input | 8 x HDMI Input connector - HDCP compliant, 480i, 720p, 1080i, 1080p input resolution | | | | |
| Cables Included | 8 HDMI/SDI Cables & Power Cord | | | | |
| Power Input | 100-240 VAC Auto Switching ~ 20 W | | | | |
| Dimensions | 19x17x3 19" Rack Mountable 1U high | | | | |
| Weight | 9 Pounds | | | | |
| Operating Temperature | 32-110 F | | | | |

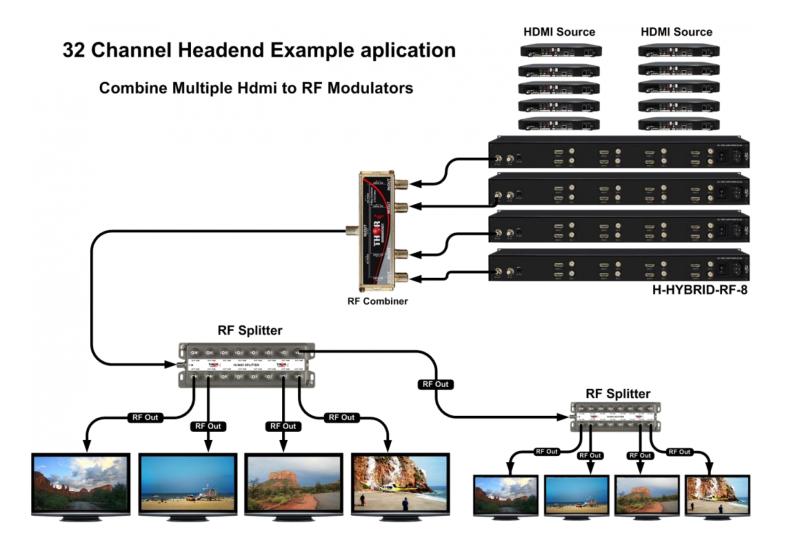
*All Specifications Subject to Change Without Notice



Drawings









| Encoder & Modulator | H-HYBRID-RF-8 | | NMS IP : 192.168.0.136 | |
|---------------------|-----------------|---------------------------|---|--|
| Web Management | | | Log out | |
| | | | | |
| Summary | Channel 1 | nel 2 Channel 3 Channel 4 | Channel 5 Channel 6 Channel 7 Channel 8 Video Bit Rate | |
| ▶ Status | Bit Rate: | 19 | (5-25)MBbps | |
| Parameters | Latency: | 100 | Low Latency | |
| ► Encode | Audio format: | AC3 | Audio Format | |
| ▶ Modulate | TS ID: | 1 | | |
| System | Program Number: | 1 | | |
| ▶ Network | Program Name: | НВО | | |
| ▶ Password | PMT PID: | 32 | | |
| Firmware | Video PID: | 48 | | |
| Configuration | Audio PID: | 49 | | |
| | PCR PID: | 48 | × | |
| | Input Source: | HDMI SDI | | |
| (| Status: | HDMI | HDMI / HD-SDI Input | |
| | Get A | pply | Selection | |
| | | | | |

| Encoder & Modulator | | H-HYBRID-RF-8 | S NR | AS IP 192.168.0.136 |
|---|----------------|--------------------------------|--------------------------|------------------------|
| Web Management | | | | Log out |
| THE BROADCAST | Modulate | | | |
| Summary | Channel 1 Cha | nnel 2 Channel 3 Channel 4 | Channel 5 Channel 6 Chan | nel 7 Channel 8 |
| ► Status | Standard: | ATSC | RF Rfe | quency |
| Parameters | RF Frequency: | DVB-C (J.83B) DVB-C (J.83A) | (50.0-950.0)MHz | Modulations Standards |
| ► Encode | Constellation: | DVB-T ISDB-T | | For Individual Channel |
| ► Modulate | Major Channel | 10 | | ~ |
| System | Minor Channel: | 1 | • | VCT |
| ► Network | Status: | • | | · |
| ▶ Password ▶ Firmware ▶ Configuration | Get | Арріу | | |