

## QMOD-HD HDTV Modulator

### Applications

Digital Signage  
HD/SD Cable Receivers  
HD/SD Satellite Receivers  
HD/SD Media Sources



### Sales Support

Need help integrating HDTV localcasting for your application? Our Sales Support staff will be happy to work with you, providing expert integration assistance and a complete systems proposal.

### Tech Support

Need tech help? Give us a call. Our tech support staff are experts in the integration industry. We research solutions in the proposal stage, advise on programming requirements, and resolve installation issues.

Our job is to make our solutions work seamlessly with your system, performing as promised.

### Related Products

232-ATSC Tuner  
Display Express Systems

CR QMOD™ technology is opening the door to new HDTV applications. Innovative in design and value, the QMOD™-HD HDTV Modulator enables cost-effective distribution of digital signage and HD subscriber sources using existing broadband coax cabling in sports, retail and entertainment facilities, corporate offices, colleges, schools and worship centers.

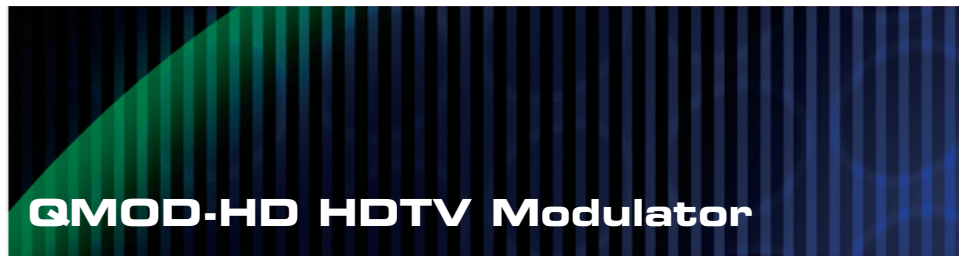
- Create your own on-site HDTV broadband distribution system using a variety HD, SD, and AV sources
- Distribute digital signage, satellite, cable, and media as HD digital cable channels over existing broadband wiring
- View HD sources at any destination using HDTV displays or tuners

### Features

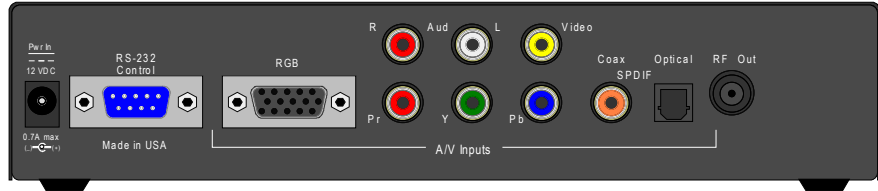
- Accepts 720p/1080i VGA, Component, or S-Video/Composite video
- Presents 480p/480i video as full-screen image
- Employs pro-grade HD encoding that minimizes artifacts for motion video and signage "tickers"
- Merges audio with video from analog stereo, digital optical and coax inputs
- Creates a high-definition 720p/1080i MPEG-2 stream for broadcast
- Delivers a fully agile QAM 64/256 digital cable channel 2-135
- Amplifies for distribution over an on-site broadband cable system with adjustable output level to 29 dBmV, compatible with all cable format broadband systems
- Sets up with front-panel buttons and easy to use menus, including inputs, encoding, channel, and RF options.
- Integrates with RS-232 control and feedback with simple ASCII commands
- Saves power and rack space using efficient design, fan-free cooling, and compact enclosure
- Includes compact switching power supply
- Mounts in optional 1RU single (RK1) or dual (RK2) 19" rack kits
- Meets RoHS safety and California energy standards

### Integration

- Connect one source to VGA, Component, or S-Video/Composite inputs
- VGA sources usually require a VGA scaler to provide 720p/1080i scan conversion and image scaling
- Connect audio to digital optical, coax, or stereo audio inputs
- Select inputs, channel, resolution, and RF output parameters from front-panel menus



## Specifications



QMOD-HD

Feature	
<b>General</b>	Integrated HD/SD A/D converter/modulator
<b>Physical</b>	8.5" [216mm] wide x 1.73" [62mm] height (1RU) x 6.0" [153mm] deep 1.5 lbs [0.68kg] +32° to 122° F operating temperature, convection cooled Rack mounting for one or two units side-by-side optional (RK1, RK2)
<b>Encoding</b>	MPEG2 Profile:MP@HL for HD, MP@ML for SD 1080i, 720p, 480p, and 480i resolution, depending on input Video Encoding bitrate 18 or 25 Mbps MPEG1, Layer 2 audio
<b>Modulation</b>	Switchable 64/256 QAM, J83 Annex B, Interleaving Modes (128,1) MER 38 dB typical
<b>Compliance</b>	FCC Class B, ROHS, meets California standards
<b>Front Panel</b>	Power button Select and directional buttons for menu setup Menu LCD, 2 lines of 20 blue characters each
<b>Back Panel</b>	
<b>Power</b>	2.1mm coaxial jack (inside center conductor positive) 0.7 A maximum, 11.5 to 13.5 VDC, 12 VDC typical
<b>RS-232 Control</b>	DB-9 male, RS-232 data link to control system 300 to 19,200 baud (9600 default), 8 data bits, no parity, 1 stop bit
<b>Video Inputs</b>	RGB: RGBHV DB-15 female (1080i/720p/480p/480i), 59.94/29.97 Hz Component: RCA Y, Pb, Pr (1080i/720p/480p/480i) , 59.94/29.97 Hz S-Video: Y(Composite), C (Blue Pb) 480i, 29.97 Hz Composite Video: RCA female (480i), 29.97 Hz
<b>Audio Inputs</b>	Digital SPDIF: Coax and Toslink optical output, PCM 48K sample rate Analog L and R: 2 stereo RCA female jacks Inputs assignable to video inputs
<b>RF</b>	'F', female, 75 ohm impedance Agile, channels 2-135 (48-860 MHz), standard, HRC, or IRC spacing 6 MHz bandwidth fits any open channel without interference to adjacent channels 1 KHz resolution, +/- 30 ppm accuracy, +/- 35 ppm stability 29 dB typical output power, attenuated in 5 steps, approx 4 dB
<b>Includes</b>	Compact PS12-1 switching power supply, 1A 12 VDC, fits power strip
<b>Options</b>	RK1 Single Rack Kit RK2 Dual Rack Kit CC-232 RS-232 Cable

## Warranty

All CR products feature a full two-year warranty.

