MediaStar HD HDMI H264 Encoder with HDCP Pro capability (798)

The MediaStar HD HDMI Encoder (798) is a robust processor blade with H264 encoding and optional HDCP Pro content protection compatibility. It is the ideal solution for use where HDCP protected media assets need to be redistributed with maintained integrity across a secure, controlled IP environment.

Key Features
- Supports HDCP Pro and AES128 encryption
- Dual stream H264 / HLS option
- Output stream resolutions up to 1080p60
- Auto configuration with MediaStar Media Manager Software
- Rack mount or stand alone appliance options
- IP streams DSCP tagged for QoS network control
- Local monitoring of unit operational status
- Compact size with low power consumption (17W)
- Hot swappable blade with retained settings configuration

Models
- 798-720p
- 798-HD
- 798-HDCP

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The MediaStar 798 encoder is a versatile unit that enables an HDMI delivered video and audio signal, (both with or without HDCP link protection) to be streamed to users across an IP network and viewed on screens and displays via MediaStar Media Players (models 782 & 780) and to PCs using MediaStar Portal pages (model 470).

Additionally, in Dual Stream HLS Mode, the unit will simultaneously encode the primary H264 stream content into a second HLS output stream to serve up to 50 users on iOS, Chromebook or Android tablets and smartphones. For larger HLS audiences it is recommended to use the 798 in conjunction with MediaStar HLS Live Streaming Server (model 469).

Valuable and confidential content can also be protected end to end using optional AES128 encryption. The 798 encoders can also process HDCP link protected content *. When protected content is detected at the encoder input, it will implement HDCP protection across the network to an unrestricted number of MediaStar Media Players (model 782) and MediaStar Portal Pages (model 470). Any unprotected content detected will be streamed through as normal. Please note that both the AES and HDCP options are not interoperable with HLS streams

The unit is a ‘hot swappable’ blade-based processor module powered from a MediaStar 3RU Rack Chassis (models 770 or 770-DR) or a single slot MediaStar Appliance Chassis (model 769).

Initial configuration and stream setup using a laptop or tablet can be via the built-in web server or by simply using the front panel buttons and LCD status display. Alternatively, multiple units within a wider system can be networked under the control of the MediaStar Media Manager software (model 462).
Front panel RS-232 and USB Host connectors allow for local connectivity. A screen may be attached to the rear panel HDMI connector for local content monitoring.

The encoder has a variety of other useful features that make it an essential part of any sophisticated AV system. These include SNMP trap events, an on-board event log that can be emailed to a specific recipient as well as IP/RS232 control commands. In addition, the unit has an IP to RS232 pass-through capability enabling remotely generated IP commands to establish a duplex communications link via the unit’s RS232 port to other co-located devices.

* HDCP is a way of securing high value protected content, for more information please see MediaStar Systems guide What is HDCP Pro?

## Specifications

### What's in the box

- 798 Encoder blade
- RJ45 patch lead (2M)
- 2 x HDMI to HDMI lead (1M)

### System Inputs & Outputs

**Video and Audio Inputs:**
- VIDEO: HDMI 1.4 Digital - Resolutions: 576i50, 480i60, 720p50, 720p60, 1080i50, 1080i60, 1080p50, 1080p60
- AUDIO: HDMI socket, digital stereo audio

**Output Encoding and Resolutions:**
- H264 Video & AAC Audio. Bandwidth 3 to 20Mbps. Resolutions 576i50, 480i60, 720p50, 720p60, 1080i50, 1080i60, 1080p50, 1080p60
- HLS

### Network & Interfaces

**LAN and Network Protocols:**
- RJ45 802.3 10/100/1000 Base-T Auto MDIX. Static or DHCP IP Address. DSCP stream tagging for QoS
- Protocols: UDP, TCP, ARP, DHCP, ICMP, IGMP V2 / V3, HTTP, HTTPS, Telnet, SNMP, Syslog, SDP, SMTP, DSCP, HLS

**USB Port:**
- USB 3.0, type A: Host port for keyboard and mouse. Software upgrade via memory stick with ONLY Cabletime protected software

**RS232 Port for 3rd Party Control Interface:**
- Rx, Tx, CTS, RTS up to 115,200 Baud. SiPI external configuration/control or IP to RS232 bidirectional pass through for external device control

### Configuration & Monitoring

**Configuration:**
- Via On board web server using laptop or tablet
- Via front panel buttons and LCD status displa
- Remotely using MediaStar Media Manager software
- Rear panel HDMI port for monitoring unit status page. Unit front and rear panel 'locator' LED function to easily identify a single unit within a rack

**Event and Status Monitoring:**
- Key operating functions reported via SNMP or Syslog traps sent to third party SNMP manager (MIB available on request)
- Automatic e-mail of Event log files via external SMTP server
- Unit operating temperature available remotely via web interface

### Other Information

**Power Dissipation and Environmental:**
- 17W (from MediaStar rack chassis). Operating temperature 0º - 40ºC (32 - 104 ºF) (Housing ambient)

**Weight and Dimensions:**
- 0.5Kg; 1.3 Lbs (798 Blade only) W4.1  H12.9  D22.5cm;  WI.6  H5.0  D8.6” occupies 1 slot of a MediaStar rack / appliance housing

**Approvals:**
- FCC, CE, UKCA, RCM, TUV, CB and UL approved as part of the MediaStar 770 or 769 rack chassis