FEATURES | BENEFITS

1080P 50 and 1080P 59.94 fps Encoding (3G) (4:2:0 Only)*
AVC 4:2:0 and 4:2:2 Video Encoding*
1, 2, 3 Frame End-to-End Latency*
3G Copper and Fiber SFP Video Interfaces
Automatic or Fixed SD, HD or 3G (Level A or Level B) Detection
Sixteen (16) Channels of Native Surround Audio Encoding*
MP1L2*, AAC*, and Dolby Digital Plus* stereo and 5.1 Audio Encoding
Multiple Mode IP Transport including RTMP and Zixi*

APPLICATIONS

Tier One Dedicated ASI, IP or Satellite Contribution
UHD Contribution, At Home Production
High Efficiency Trunking at 3, 2, 1 Frame Delay with Frame Accurate Sync
Public IP Transport

Adtec’s EN-200 contribution class encoder supports the most demanding video applications with super low delay, AVC 4:2:2 and 4:2:0 chroma encoding.

The lightweight EN-200 offers premium features and exceeds requirements in its 1 RU chassis, including redundant AC power supplies, enhanced control and monitoring via front-panel, browser and SNMP. Video support includes SD, 2D-HD, and 4K (Ultra HD) synchronous AVC encoding. The EN-200 provides up to sixteen (16) channels of audio, robust VBI support and ease of use. In addition to encoding MPEG 1 audio, the EN-200 adds support for Dolby Digital Plus, ACC-LC and HE-AAC (v1/v2) mixed mode audio encoding supporting stereo (2.0) and multi-channel surround (5.1) modes.

With the ability to encode and concurrently transport services via ASI, IP and RF, the EN-200 offer flexibility and reliability. The DVBS/S2/S2X modulator supports IF and L-band with 10MHz insertion. Modes range from QPSK up to 32APSK. With low delay and frame accurate sync, Adtec’s EN-200 is a key part in a complete UHD solution and at home production applications.
Software keys are required to unlock full hardware support. Please contact your sales person for more info.

**VIDEO ENCODER PROFILES:** *
MPEG 4 HD/SD Profiles: MP Level 3.2, Hi422P (Level 3.2), Hi422P (Level 4.1), HIP
Supported Resolutions: 480i/59.94, 576i/50, 720p/50, 720p/59.94, 1080i/50, 1080i/59.94, 1080i/60, 1080i/60.33, 1080i/60.00

**VIDEO INPUT:**
- **Composite:** SD Composite Analog (CVBS), Composite NTSC and PAL
- **SDI:** SD-SDI (SMPTE 259M - 270 Mbits) with embedded audio per SMPTE 272M, HD-SDI (SMPTE 292M - 1.485 Gbits) with embedded audio per SMPTE 299M, 3G-SDI
- **Interface:** HD/SD-SDI Auto frame rate and resolution detection
- **Connector:** 1x BNC (75 Ohm), 1x 3G BNC (75 Ohm)
- **Optical:** SFP Cage for Video and Audio input module, support for SD-SDI, HD-SDI, and 3G-SDI and embedded audio.

**AUDIO PROCESSING PROFILES:** *
- **Supported Audio:** Up to 8 pairs (16 channels) of audio
- **MPEG 1 Layer 2, AAC-LC (2.0/5.1), AAC-HE v1/v2 and AAC-6.0 surround encode
- **Audio Input:** Dolby Digital AC-3 stereo (Up to 4 stereo pairs)
- **Interface:** SDI, AES, Analog
- **Connector:** 8x BNC (75 Ohm) and 1x DB9

**_CONDITIONAL ACCESS:** BISS 0/1/E standard

**OUTPUT:**
- All outputs can operate concurrently (ASI, IP and RF)
- **ASI Output:** 3x BNC (75 Ohm)
- **ISO13818-1 MPEG 2 Transport Stream per EN 50083-9:1997 (188 byte only)
- **Transport Over IP (TSoIP) Output:** 2x RJ45 10/100/1000 GigE
- **ISO13818-1 MPEG 2 TS per EN 50083-9:1997
- **UDP, RTP, and SMPTE 2022-7 (COP3 FEC)
- **MPTS or SPTS user definable
- **RTMP**
- **Zixi Feeder**

**VBI / VANC PROCESSING:**
- Waveform / Ancillary support for: AFD, Closed Captions, OP47 Teletext, VITC, and WSS
- CEA 608 -> 708 Up-conversion

**IF AND L-BAND MODULATOR - Optional:**

*EN-200/IF/LB/10M Model*
- DVB-S/S2/S2X Capable Modulator supporting 5%-35% rolloff.
- Connectors: 4X BNC (500ohm)
- Modulation Modes: QPSK / 8PSK / 16APSK / 32APSK
- LB Output Frequency Range: 950 MHz to 2150 MHz
- IF Output Frequency Range: 50 MHz to 180 MHz
- Interface Rate: 50 kbit/s - 150 Mb/s (modcod & interface dependent)
- Baudrate range: 0.05 - 54 Mbaud. (modcod dependent)
- Clean Channel Technology - Roll-off factors: 5%, 10%, 15%, 20%, 25%, 35% for all modulations
- RF Carrier ID compliant
- *IF and L-Band outputs are not active simultaneously

**PHYSICAL:**
- Operating Temperature: -20 to +50°C
- Power Supply (nominal): 70 - 240 VAC
- Weight: 9 lbs, base version
- Measurements: (H X W X D) 1.75" X 19" X 18"

**MANAGEMENT:**
- Front Panel controls
- Browser-based Web Interface
- SNMP
- SNMP v2c available for NMS integration

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