**Features**

- **Inputs:** One or two SDI or HD-SDI inputs
- **Outputs:** Encodes one or two high quality MPEG-2, H.264 1080p, or H.265 720p streams through redundant GigE ports (RJ45)
- **Encoding latency:** 150 milliseconds
- **8 or 10 bit encoding with 4:2:2 or 4:2:0 color sampling**
- **Supports logo insertion, text overlay, and SCTE 35 compliant cue tone insertion ("ad markers") on outputs (SCTE 104 to SCTE 35)
- **Supports DTMF tones and DTMF to SCTE 35 conversion**
- **Now includes stream archiving (400 GB)**
- **Able to upconvert incoming SD streams to HD, and scale down**
- **Web GUI is manageable from anywhere – includes some scheduling**
- **Supports NTSC or PAL**
- **Supports Octoshape™ Infinite HD™ and Verizon® upLynk natively**
- **Supports H.264 High Profile @ Level 4.0 (HP@L4)**
- **Supports HEVC main profile**
- **Encoding bit rates: .1 to 50 Mbps**
- **Supports 1080i, 1080p, 720p, 576i, 480i, 480p, CIF, QCIF, qHD, H.264up and many others, and custom resolutions**
- **IP output protocols: UDP, RTP, RTMP (Open Flash), HLS, HTTP, with DLNA support**
- **Expects embedded SDI audio**
- **Audio Output: AAC, MPEG-1 Layer II, and/or optional “SurCode for Dolby Digital” AC-3**
- **Up to 4 audio pairs for support of different languages**
- **Tested to work with ATLAS™ and Wowza® media servers**
- **Tested compatible with major brands of professional H.264 and H.265 decoders and video servers**
- **SNMP, REST or SOAP remote management**
- **Redundant (dual) power supplies**

Real time, highly reliable, low latency, dual channel SD or HD (SDI), H.265/HEVC and H.264/AVC, 8 or 10 bit 4:2:2 or 4:2:0 Mezzanine TS Encoder with outstanding video quality.

1 RU, quick starting, standards compliant, embedded Linux® based. Incorporates a "minimal" Linux® kernel (residing on an SSD) yielding a highly reliable premium quality encoder manageable from anywhere via web GUI.

**Applications**

- **News, satellite, and sports contribution**
- **Backhaul/Monitoring for Broadcasters**
- **DLNA output to smart TV’s**
- **Military, Corporate Video, Religious Services, Special Events**
- **Origin Encoder for Grooming Servers**
- **Event streaming via ISPs or CDNs**

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**PREMIO™**

H.264/H.265/MPEG-2

Real time, highly reliable, low latency, dual channel SD or HD (SDI), H.265/HEVC and H.264/AVC, 8 or 10 bit 4:2:2 or 4:2:0 Mezzanine TS Encoder with outstanding video quality.

Supports closed captioning and teletext with overlay and SCTE 35 ad marker insertion.

Supports most industry standard "protocols" like UDP or RTP and "Wrappers" such as HLS, RTMP, DASH, etc. Audio output is AAC, MPEG-1 Layer II, and/or optional “SurCode for Dolby Digital” AC-3.

Encodes one or two high quality H.264 1080p or H.265 720p streams at .1 to 50 Mbps at popular GOP sizes, frame rates, refresh rates, or aspect ratios. Software is scanned for vulnerabilities and open ports.

Operators can add logos to the streams, and can add SCTE 35 ad markers via SCTE 104.
The PREMIO 4:2:2/H.264/H.265 is a premium quality low latency MPEG-2, H.264, and H.265 encoder, able to encode video to mezzanine quality. It is designed for critical contribution applications and has many redundancy features.

The system can overlay logos, text, and closed captioning. It supports SCTE 35 triggers for ad insertion. A recently added feature is stream archiving (400 GB).

Ordering options include DVEO’s patented DOZER™ UDP packet recovery technology, for reliable video quality over the public internet and across long distances.

This unit is designed to be affordable, scalable, and reliable. Modifications to video formats are easily created. Remote management and multi level security is built in.
## Ports Utilized

<table>
<thead>
<tr>
<th>Protocol</th>
<th>TCP Ports</th>
<th>UDP Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTTP</td>
<td>80, 8000, 8001, 8080, 1-65535 (out)</td>
<td></td>
</tr>
<tr>
<td>HTTPS</td>
<td>443</td>
<td></td>
</tr>
<tr>
<td>RTMP</td>
<td></td>
<td>1935</td>
</tr>
<tr>
<td>RTP</td>
<td>6970-6999, 16384-32767</td>
<td></td>
</tr>
</tbody>
</table>

## Supported Resolutions

### Supported Resolutions – Input and Output

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920 x 1080</td>
<td>720 x 480</td>
<td>480 x 480</td>
</tr>
<tr>
<td>1280 x 720</td>
<td>704 x 480</td>
<td>480 x 320</td>
</tr>
<tr>
<td>720 x 576</td>
<td>640 x 480</td>
<td>320 x 240</td>
</tr>
<tr>
<td></td>
<td></td>
<td>qHD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H.264up</td>
</tr>
</tbody>
</table>

Also supports any custom resolution not listed here.

Note: Does not support 608 closed captioning for SDI input. Only 708 is supported.

Note: Supports PAL TO NTSC conversion but not NTSC to PAL.

H.265 output resolutions are 1080, 720, 576, 480. H.265 576/480 resolutions only have 4:3 aspect ratio.

## Options

- Optional DOZER™ Automated UDP Packet Recovery protocol, enabling error-free video delivery over UDP. DOZER ensures smooth MPEG-2, H.264, and H.265 delivery through DVEO patented algorithms for automated packet recovery and re-ordering of out-of-sequence packets.

## Ordering Information

PREMIO 4:2:2/H.264/H.265 – HD-SDI In, 1 RU system
PREMIO 4:2:2/MPEG-2 – HD-SDI In, 1 RU system