UVRX-2022 (SDI) – 4 Port HD/SD/DVB-ASI Universal Video RX Module – Uncompressed Video

The UVRX-2022 board is a “Universal” four port video receiver card that is compatible with SMPTE 2022 sources.

**KEY FUNCTIONS:**
- External interface to SD/SDTI/DVB-ASI user circuit
- Internal electrical interface to MD8000 SW-CNT modules

**KEY FEATURES:**
- Outputs 1-4 input signals
- 3G-SDI/1080P
- 3D Dual-Link Supported
- ETR290 Performance Monitoring
- Optical (SFP) or Electrical Video Interfaces (75 ohm, unbalanced)
- SMPTE 2022 1/2 & 5/6
- Hitless Switching
- Auto Protection Switching (per Service/Port)
- SD-SDI: 525i (59.94 Hz), 625i (50 Hz)
- HD-SDI: 720p, 1080i, 1080p (50 or 59.94 Hz)

**APPLICATIONS:**
- Carrier Class Media Networks
- Flawless Contribution Video-Transport
- High Performance Studio Interconnects
- Reliable Content Delivery Systems
- Integrated Live, Recorded and File-Based Communications

A versatile and widely deployed MD8000 line module, the UVRX-2022 board is a “Universal” four port video receiver card that is compatible with SMPTE 2022 sources. The SMPTE 2022 specification describes a standardized method of encapsulating video signals for transmission across IP transport networks. The MD8000-UVRX-2022 is compatible with the following SMPTE 2022 compliant encoder (source) line cards:
- MD8000-JPEG-2022 (in uncompressed mode)
- MD8000-UVTX-2022
- MD8000-UVTX-J2K-2022 (in uncompressed mode)
- MD8000-VIF-2022
- MD8000-VTX-4S-2022

The four Ethernet streams terminating on this line module can originate anywhere in the MD8000 network. All Ethernet packets sent to and received by this module are transferred across the MD8000 backplane via the Switch Controller module (SW-CNT). DVB-ASI output signals are reconstructed from the transparent Ethernet transport of MPEG2TS. Null packets within the ASI wrapper and are re-inserted at the destination matching the original DVB-ASI input signal. The MD8000-UVRX-2022 provides TR101-ETR290 performance monitoring and real time analysis of each DVB-ASI stream.

The MD8000-UVRX-2022 provides resilient Forward Error Correction (FEC) and Lossless/Hitless path protection switching for extremely robust signal transport. Multiple format outputs supported simultaneously.

The UVRX-2022 module can output the following uncompressed signal types:
- DVB-ASI
- SD-SDI
- HD-SDI
- HD-SDTI
- 3G-SDI
- 3D dual-link
MD8000 – UVRX-2022 (SDI) – 4 Port HD/SD/DVB-ASI Universal Video RX Module – Uncompressed Video

MD8000 – UVRX-2022 (SDI) – Optical Rear Board Connectors

MD8000 – UVRX-2022 (SDI) – Electrical Rear Board Connectors
### Functional Specifications:

| Output | SD-SDI  
| HD-SDI | Format | 625i (50 Hz), 525i (59.94 Hz); SMPTE 259M  
|        |        | 525i, 725P, 1080i, 1080P (59.94 Hz) |
| Audio | Full VANC/HANC |
| Interface | SMPTE 259M, SMPTE 292M, SMPTE 424M |
| HD-SDTI/SDTI Interface | SMPTE 305M, SMPTE 348M |
| DVB-ASI | Format | MPEG2TS |
| Maximum Cable Length | HD-SDI | 70m |
|        | SDI | 200m |
|        | DVB-ASI | 100m (Belden 1694A) |
| All Signal Amplitude | 800 mVp-p = -10% (75 Ohm Load) |
| Rise Time | 0.4 - 1.5 ns (at 20% - 80% amplitude) |
| Fall Time | 0.4 - 1.5 ns (at 20% - 80% amplitude) |
| ABS (Rise-Fall) | 0.5 ns or less |
| Impedance | 75 Ohm, unbalanced |
| Return Loss | 15 dB or more (5 MHz - 270 MHz)  
|        | 10 dB or more (742.5 MHz - 1.485 GHz)  
|        | < 10 dB (2.97 GHz) |
| DC Offset | 0.0 V ± 0.5 V |
| Jitter | Timing: 0.2 UI or less  
|        | Alignment: 0.2 UI or less |

### Ordering Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>ORDER NUMBER</th>
<th>ORDER CODE</th>
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<tbody>
<tr>
<td>Universal 4 port Video Receiver - Supports transparent HD-1080P (2 ports), HD-SDI, SD-SDI and DVB-ASI. Includes electrical rear connector panel</td>
<td>MD801055</td>
<td>MD8000-UVRX-2022-C</td>
</tr>
<tr>
<td>Universal 4 port Video Receiver - Supports transparent HD-1080P (2 ports), HD-SDI, SD-SDI and DVB-ASI. Includes rear connector panel for four SFP cages. SFP’s not included</td>
<td>MD801055</td>
<td>MD8000-UVRX-2022-O</td>
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