

# 7881IRD-H264HD-LB Series

Professional DVBS/S2 MPEG2/H.264 SD/HD Integrated Receiver Decoders



The 7881IRD-H264HD-LB is the basis of a professional platform for receiving, demodulating and decoding digital DVB-S/S2 satellite signals. With a compact, modular form-factor the 7881IRD represents one of the highest density and most flexible solutions in the industry. An innovative removable front control panel and 1RU chassis allow the IRD to be packaged in the traditional IRD form-factor, while maintaining all of the benefits of modularity.

Applications include signal reception for broadcasters, cable, DTH and IPTV providers, or any other small to large head-end operators who need to receive and utilize or re-distribute satellite content. The 7881IRD series provides ASI and IP outputs, ideal for turnaround, transcoding, monitoring or other applications where the received signal remains in the compressed domain. For baseband output, the 7881IRD utilizes an advanced decoder with support for both MPEG2 and H.264/AVC, SD or HD encoded signals, optionally up to 4:2:2 10-bit.

In addition to a quad-RF input, the 7881IRD also provides inputs for IP and ASI signals, making it a future-proof, universal reception platform for signals delivered over satellite, fiber and other network media.

Full monitoring and control of the IRD are relayed over SNMP, for convenient remote access using Evertz own VistaLINK® PRO SNMP monitoring and control package. Additionally, low-speed data support is provided for in-band control.

For applications requiring decryption, the 7881IRD provides a slot for installation of a customer supplied conditional access module. DVB-CI compliant conditional access modules and formats are supported.

## ► Features & Benefits

- Modular design, allowing flexible configurations along with easy system reconfiguration and service
- Mounted in the 7801FR and fitted with the 7801CP control panel, yielding a 1RU IRD with removable front control panel and optional redundant power supplies, all of which are hot-swappable and may be serviced without any de-cabling required.
- Up to two units may be mounted in the 7801FR and used with the 7801CP, providing a dual-IRD solution in 1RU
- Future-proof with upgrade paths to support future modulation and encoding technologies
- Standard support for advanced modulation schemes, including DVB-S2 with 16APSK and 32APSK
- Flexible decoding of SD, and HD as standard
- Support for encoding profiles from distribution to contribution grade, including H.264 in 4:2:0 8-bit and optional 4:2:2 10 bit formats, along with legacy MPEG2
- Available DVB-CI slot for conditional access modules
- Available BISS and BISS-E decryption
- Flexible mid-stage access to compressed domain signals, including ASI and optional IP output along with ASI and optional IP inputs
- Straight pass through or PID filtering/remapping of compressed stream outputs
- Standard Dolby pass through and decode of Dolby AC-3 and MPEG2 Layer 1 audio
- Optional decoding of Dolby E, Plus and AAC
- Eight AES outputs
- Optional Audio Video Monitoring (AVM) for audio mute and video freeze and black detection
- Control through web-browser or SNMP using third-party application or Evertz' own VistaLINK SNMP control and monitoring software
- Optional SCTE 105/34 translation

Front View - 7881IRD in 1RU with Control Panel

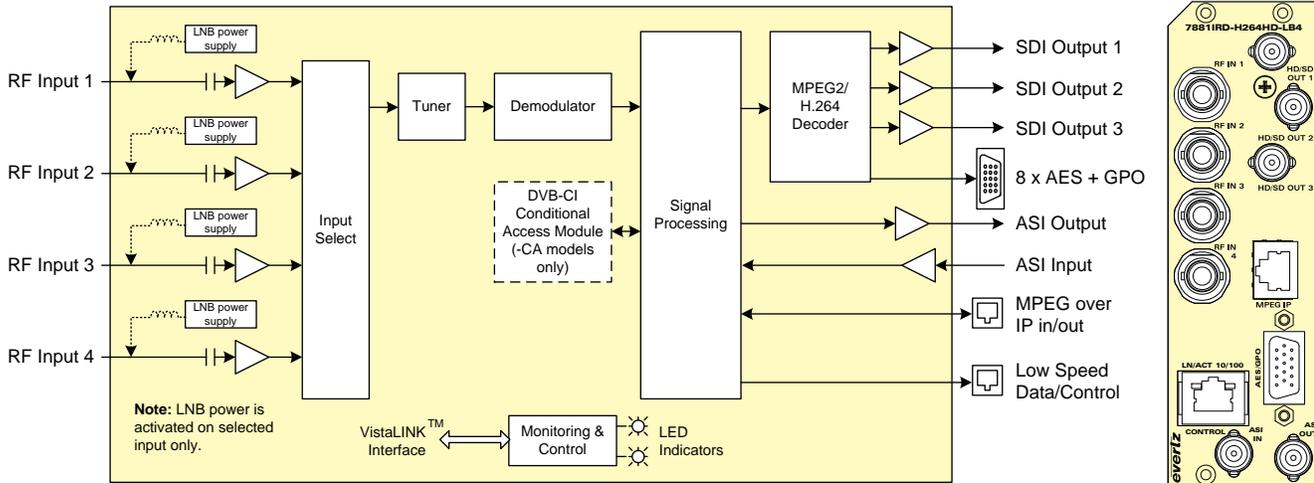


Rear View - 7881IRD in 1RU



The Complete Solution Provider





### Specifications

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|---|---|--|
| <p><b>RF Input:</b><br/>                 Number: 4<br/>                 Connector: F-Type<br/>                 LNB power: Activated on selected input<br/>                 Current: 400mA<br/>                 Voltage: 13, 18V (selectable)<br/>                 LO Control: 22kHz (on/off selectable)<br/>                 Frequency: 950-2150 MHz<br/>                 Power: -20 to -60dBm</p> <p><b>Modulation Support:</b><br/>                 Symbol Rate: Up to:<br/>                 8APSK: 67 Msps<br/>                 16APSK: 50 Msps<br/>                 32APSK: 40 Msps</p> <p><b>Coding Rates:</b><br/>                 DVB-S QPSK: 1/2, 2/3, 3/4, 5/6, 7/8<br/>                 DVB-S2 QPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10<br/>                 DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10<br/>                 DVB-S2 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10<br/>                 DVB-S2 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10</p> <p><b>ASI Input:</b><br/>                 Number: 1<br/>                 Type: ASI per DVB TR101-891<br/>                 Connector: 75Ω BNC</p> | <p><b>MPEG over IP Input/Output (+IP Option):</b><br/>                 Number: 1<br/>                 Type: SMPTE 2022-1, -2<br/>                 Connector: RJ45, 10/100/1000</p> <p><b>Conditional Access Support:</b><br/>                 DVB-CI slot</p> <p><b>Baseband Video Outputs:</b><br/>                 Number: 3<br/>                 Connector: BNC<br/>                 Type: SDI (SMPTE ST 259), HD-SDI (SMPTE ST 292-1)</p> <p><b>AES Audio Outputs:</b><br/>                 Number: 8<br/>                 Connector: BNC breakout from DB-15<br/>                 Type: Unbalanced AES</p> <p><b>Audio Processing:</b></p> <ul style="list-style-type: none"> <li>• Supports decoding of MPEG1 Layer 2, AAC, Dolby E, Plus and AC-3</li> <li>• Supports Dolby E and AC-3 pass-through</li> </ul> <p><b>ASI Output:</b><br/>                 Number: 1<br/>                 Type: ASI per DVB TR101-891<br/>                 Connector: 75Ω BNC</p> | <p><b>Conditional Access Support:</b><br/>                 One DVB-CI slot</p> <p><b>Low Speed Data:</b><br/>                 Number: 1<br/>                 Type: De-encapsulation from control data<br/>                 PID<br/>                 Connector: RJ45, 10/100/1000</p> <p><b>Frame Sync (+FSE Option):</b></p> <ul style="list-style-type: none"> <li>• Sync 1080i/59.94, 1080i/50, 720p/59.94, 720p/50, 525i/59.94, 625i/50</li> <li>• Programmable output phase with respect to reference input</li> <li>• Reference input via common 7800FR frame reference connector</li> </ul> <p><b>Control:</b></p> <ul style="list-style-type: none"> <li>• SNMP over Ethernet via frame controller</li> <li>• Web browser</li> <li>• Low speed control data over Ethernet output derived from data PID</li> </ul> <p><b>Electrical:</b><br/>                 Power: &lt;46 Watts<br/>                 Voltage: 12VDC<br/>                 Temperature: 0-50°C</p> <p><b>Physical:</b><br/>                 Number of slots: 2</p> |
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### Ordering Information

|                              |  |
|------------------------------|--|
| <b>7881IRD-H264HD-LB4</b>    | DVBS/S2 IRD, up to 32APSK, quad L-Band input, single demodulator, ASI input and output, MPEG2/H264 SD/HD decode (4:2:0 8 bit)  |
| <b>7881IRD-H264HD-LB4-CA</b> | DVBS/S2 IRD, up to 32APSK, quad L-Band input, single demodulator, single DVB-CI conditional access slot, ASI input and output, MPEG2/H264 SD/HD decode (4:2:0 8 bit) |

**Ordering Options**

|                   |   |
|-------------------|---|
| <b>+FSE</b>       | Integrated frame synchronizer                       |
| <b>+10B422</b>    | 4:2:2 (MPEG2/H.264) and 10 bit (H.264) decode       |
| <b>+AVM</b>       | Basic freeze, black and mute audio/video monitoring |
| <b>+DD</b>        | Dolby E decode                                      |
| <b>+AAC</b>       | AAC decode  |
| <b>+IP</b>        | IP midstage in/output                               |
| <b>+SCTE104-1</b> | SCTE 35/104 translation                             |
| <b>+DBISS</b>     | BISS and BISS-E decryption                          |

**Rear Plate Suffix**  
**+3RU** 3RU Rear Plate for use with 7801FR Multiframe

#### 1RU Enclosure and Front Control Panel

Note: 7801FC is required for 1RU IRD configuration

|                     |  |
|---------------------|--|
| <b>7801FR+IRDCP</b> | 1RU Multiframe with front control panel installed for use with 7881IRD |
| <b>+781PS</b>       | Redundant power supply (optional)                                      |
| <b>7801FC-IRD</b>   | Frame controller module for use with 7801FR+IRDCP and 7881IRD          |