Vendor: **Lantana™ IP/DVB-S-S2**

**Overview**

RF modulators convert video to RF (radio frequency) so the video can be transmitted to a television via its RF input. DVB-S and DVB-S2 are the digital broadcast standards used for satellite broadcasting worldwide. DVB-S2 is the second generation of DVB-S, with enhanced modulation up to 32APSK.

The Lantana IP/DVB-S-S2 is a remotely operated, software definable, frequency agile modulator that sends live or recorded video streams to multiple HD monitors via inexpensive RF over coaxial cable. With its included software, one can create a powerful remote signage server. It does not need a computer to feed content to it.

For example, retailers can install one unit at each store, along with a USB thumb drive loaded with numerous videos. Using remote management software, an operator in the home office can program which video will play out on multiple HD monitors at each location. The Lantana IP/DVB-S-S2 is also suitable for set-top box testing and laboratory applications.

The input can be IP, USB, DVB-ASI, or SMPTE 310M, single or multi program transport streams. One DVB-S or DVB-S2 channel can have two HD streams.

Customers can purchase licenses for additional modulation profiles and upgrade the unit immediately. The Lantana IP/DVB-S-S2 accepts and plays out MPEG-2 or H.264 streams (SPTS or MPTS) from IP or ASI, or plays transport streams from a local flash-based USB “stick”.

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**Features**

- **Input:** IP, DVB-ASI, USB, or SMPTE 310M – plays transport streams from RTP/UDP over Ethernet, SD memory card, USB stick, or ASI source
- Accepts MPEG-2 or H.264 Streams (SPTS or MPTS)
- **Output:** DVB-S or DVB-S2
- ETS 302 307 standard compliant
- RF Output Frequency: 55-860 MHz, 956-2036 MHz
- **Payload:**
  - DVB-S – Up to 72 Mbps
  - DVB-S2 – Up to 200 Mbps
- Field upgradeable – can be reprogrammed to add additional profiles or new firmware
- Playback Scheduler for Day, Week, or Month
- Ships with Java®-based application GUI
- Programmable RF output level (0.1 dB step)
- White noise addition over modulated signal to have desired C/N ratio
- Sample transport streams available
- Special Bundle Prices for multiple modulations
- Works standalone and will reboot to configured state

**Applications**

- Digital signage
- In Store Demo of plasma televisions
- Sending HD video to multiple monitors in sports arenas and stadiums
- Set-top box testing
- Laboratory applications
**GUIs**

**Main GUI**

**Playout Scheduler**

**Rear Connectors**

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**Specifications**

**Inputs/Outputs**

<table>
<thead>
<tr>
<th>Input</th>
<th>UDP over IP (CBR only), USB, SD card, DVB-ASI, or SMPTE 310M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>DVB-S or DVB-S2</td>
</tr>
</tbody>
</table>

**RF output**

- Frequency: VHF/UHF 55–860 MHz
- L-BAND 956–2036 MHz
- Level: VHF/UHF -31.5 to 0 dBm
- L-BAND -25dBm max
- Frequency accuracy: Within 3 ppm accuracy
- Attenuation step: 0.1 dB
- Phase noise <-90dBc/Hz @ 10 KHz

**Connectors** 75 Ohm BNC

**Ethernet**

10/100/1000 Mbit Ethernet port for remote control and TS input

**USB**

USB 2.0 for flash memory

**SD Card**

SDHC class 2/4/6/10 supported

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**DVB-S (QPSK) Specifications**

- Standard: ETSI EN 300421 (DVB-S) compliant
- Code Rates: 1/2, 2/3, 3/4, 5/6, 7/8
- Symbol Rates: 1–45 M symbols/s
- DC Blocking Voltage: 50V max
- Maximum Payload: 72 Mbps

**DVB-S2 Specifications**

- Standard: ETS 302 307 broadcast services compliant
- LDPC Code: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, and 9/10
- Modulation Mode: QPSK, 8PSK, 16APSK, 32APSK
- Baseband Shaping Filter: Roll-off 0.20, 0.25, 0.35, none selectable
- Symbol Rates: 1–45 M symbols/s
- DC Blocking Voltage: 50V max
- Maximum Payload: 200 Mbps

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**Physical & Power**

- Dimensions (L x W x H): 9.25 x 2.76 x 6.7 inches (235 x 70 x 170 mm)
- Weight: 3.2 lbs. (1.45 kg)
- Power: External 14-20V DC power supply
- Operating Temperature: 32° to 95° F (0°C to 35°C)
- Humidity: 10% ~ 90%, Non-condensing
- Conformities: FCC, RoHS, CE Mark

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**Ordering Information**

Lantana IP/DVB-S-S2

Note: Software ships with Lantana IP/DVB-S-S2 at no additional cost.

Note: This unit is upgradeable with all other modulations, like 8VSB, QAM, DVB-C2, DVB-T, DVB-T2, CMMB, DTMB, T-DMB, ISDB-Tb, ISDB-S, etc.

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