**Overview**

RF modulators convert a video signal to RF (radio frequency) so the video can be transmitted to a television via its RF input.

DTMB (Digital Terrestrial Multimedia Broadcast) is the digital broadcasting standard used in China for regular terrestrial digital TV and for mobile TV. This standard was previously called DMB-T/H (Digital Multimedia Broadcast-Terrestrial/Handheld).

The **Lantana IP/DTMB** 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 web-based management, an operator in the home office can program which video will play out on multiple HD monitors at each location. The Lantana IP/DTMB 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 DTMB channel can have two HD streams.

Customers can purchase licenses for additional profiles and upgrade the unit immediately. The Lantana IP/DTMB 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 USB stick or ASI source
- **Accepts MPEG-2 or H.264 Streams (SPTS or MPTS)**
- **Output**: DTMB (DMB-T/H)
- **RF Output Frequency**: 470-860 MHz
- **GB20600-2006 compliant**
- **Field upgradeable** – can be reprogrammed to add additional profiles
- **Playback Scheduler** for Day, Week, or Month
- **Ships with Java®-based GUI**
- **On board Channel 1-135 selectable RF output up-converter**
- **Programmable RF output level** (0.1 dB step)
- **White noise addition over modulated signal to have desired C/N ratio**
- **Sample transport streams available**
- **SNMP (10/100/1000 Ethernet) remote web-based LAN management**
- **Bit rates**:
  - UDP over IP: Up to 80 Mbps
  - USB or SD card: Up to 130 Mbps
- **Special Bundle Prices** for multiple modulations
- **Works standalone and will reboot to configured state**

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**Applications**

- **Digital signage**
- **In Store Demos of DTMB receivers**
- **Sending HD video to multiple monitors in sports arenas and stadiums**
- **Set-top box testing**
GUIs

Main GUI

Options

Rear Connectors

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>DTMB</td>
</tr>
<tr>
<td>Frequency</td>
<td>174–230 MHz, 470–854 MHz</td>
</tr>
<tr>
<td>Level</td>
<td>VHF/UHF -31.5 to 0 dBm</td>
</tr>
<tr>
<td>Freq accuracy</td>
<td>+/-5 KHz max</td>
</tr>
<tr>
<td>Attenuation step</td>
<td>0.1 dB</td>
</tr>
<tr>
<td>Phase noise</td>
<td>&lt;-90dBc/Hz @ 10 KHz</td>
</tr>
<tr>
<td>RF step size</td>
<td>50 KHz step</td>
</tr>
</tbody>
</table>

Connectors

75 Ohm BNC

Bitrates

When playing through UDP over IP:
Up to 80 Mbps
When playing through USB/SD card:
Up to 130 Mbps

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

DTMB Specifications

Standard
GB20600-2006 compliant

Number of Carriers
1 or 3780 sub-carriers selectable

Frame Length
4200, 4335, 4725 symbols

Constellations
4 QAM-NR, 4 QAM, 16 QAM, 32 QAM, 64 QAM

Code Rates
0.4, 0.6, 0.8

Time Interleaving
240, 720 symbols

Bandwidth
8 MHz

Physical & Power

Dimensions
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

Ordering Information

Lantana IP/DTMB

Note: Software ships with Lantana IP/DTMB at no additional cost.
Note: This unit is upgradeable with all other modulations, like QAM, CMMB, T-DMB, ISDB-Tb, ISDB-S, 8VSB, DVB-C2, DVB-S/S2, DVB-T, DVB-T2, etc.