Lantana™ IP/DTMB

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 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/DTMB is also suitable for set-top box testing and laboratory applications.

The input can be IP, USB, or DVB-ASI, single or multi program transport streams. One DTMB channel can have two HD streams.

Customers can purchase licenses for additional modulation 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”.

Features
- Input: IP, DVB-ASI, or USB – 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: DTMB (DMB-T/H)
- GB20600-2006 compliant
- RF Output Frequency: 36-2150 MHz
- Payload = Up to 32.48 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 Demos of DTMB receivers
- Sending HD video to multiple monitors in sports arenas and stadiums
- Set-top box testing
- Laboratory applications
Specifications

Inputs/Outputs

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

RF output
- Frequency: VHF/UHF 36~2150 MHz
- Level: VHF/UHF -31.5 to 0 dBm
- Freq. accuracy: Within 3 ppm accuracy
- Attenuation step: 0.1 dB
- Phase noise <-90dBc/Hz @ 10 KHz

Connectors
- 75 Ohm BNC

Bitrates
- Up to 32.48 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

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (length x width x height)</td>
<td>9.25 x 2.76 x 6.7 inches (235 x 70 x 170 mm)</td>
</tr>
<tr>
<td>Weight</td>
<td>3.2 lbs. (1.45 kg)</td>
</tr>
<tr>
<td>Power</td>
<td>External 14-20V DC power supply</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>32° to 95° F (0°C to 35°C)</td>
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<tr>
<td>Humidity</td>
<td>10% ~ 90%, Non-condensing</td>
</tr>
<tr>
<td>Conformities</td>
<td>FCC, RoHS, CE Mark</td>
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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.

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