

7780MD-LB

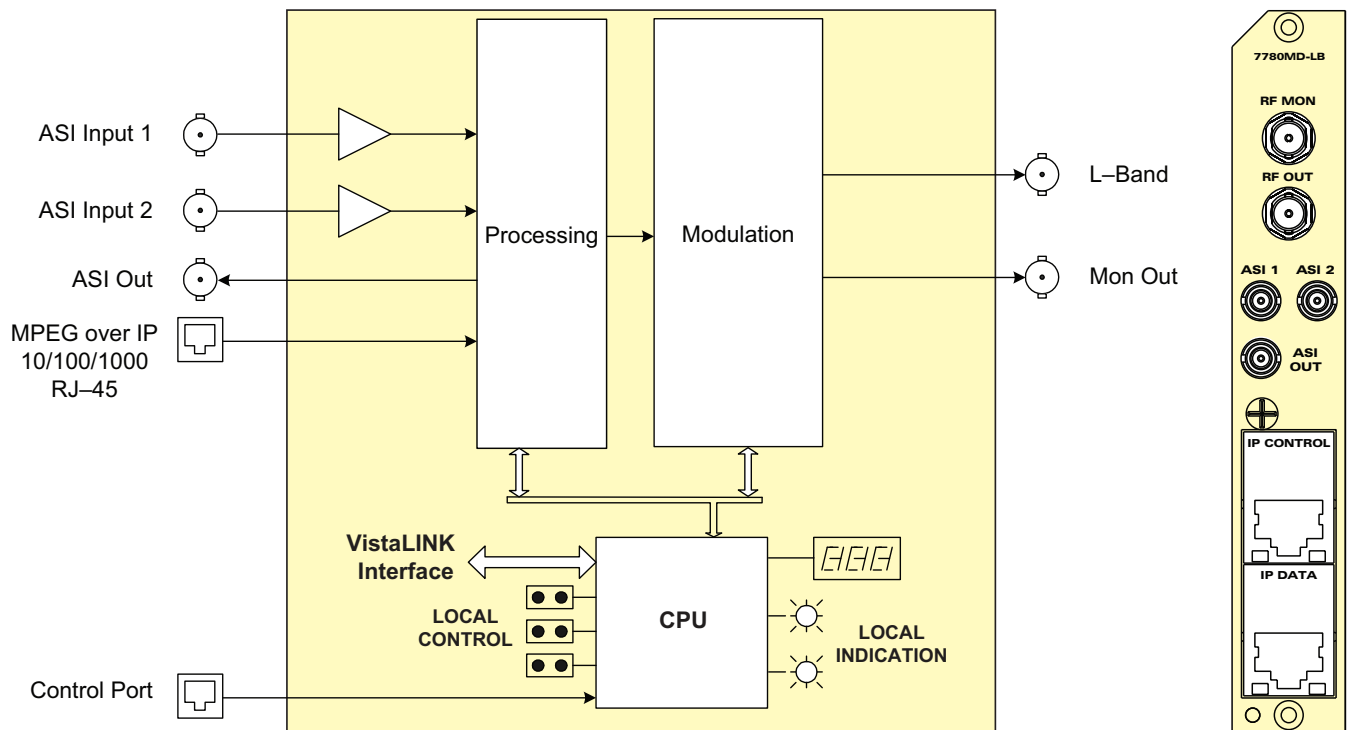
DVB-S/S2/S2X L-Band Satellite Modulator

The 7780MD series is a complete hardware-based professional DVB-S/S2 DVB-S2X (Broadcast and DSNB profiles) standard. Satellite modulator solution, able to process data rates up to 200 Mbps with high-order modulation schemes up to 64APSK. This module works conjointly with Evertz encoders and various other 7800 series modular products, all integrated in the same chassis in infinitely flexible combinations. The 7780MD modulator series rounds out a best-in-class and highly flexible encoder to uplink solution.

Monitoring parameters such as input bit rate, occupied bandwidth, output level and transmit status provide extensive information on modulator status and signal quality. These parameters as well as full control of the modulator are relayed over SNMP, for intuitive remote access using Evertz' own VistaLINK® PRO SNMP monitoring and control package.

►Features & Benefits

- Full DVB-S/S2 and DVB-S2X compliant with modulation schemes available up to 64APSK
- Wideband output frequency range, adjustable from 950–2150MHz
- Symbol rates range from 1–68 MSps
- Carrier identifier (CID) at modulator level
- Modulation and coding support: Constant Coding and Modulation (CCM), Variable Coding and Modulation (VCM), Adaptive Coding and Modulation (ACM)
- Incoming TS bit rate management includes null packet adaptation (PCR re-stamping), padding insertion, advance padding insertion and dummy PL frame
- Dual, selectable ASI and IP inputs for flexibility in system configuration and selection of various accompanying encoder modules
- Monitoring port provided for local monitoring of signal integrity
- Interoperable with Evertz and third-party industry standard professional satellite IRDs
- Fully hot-swappable from front of frame for low MTTR
- Control through web browser or SNMP using third-party application or Evertz' own VistaLINK® PRO SNMP control and monitoring software (optional front panel control is also available)
- Multistream per-carrier support according to EN 302 307 standard
- Optional BISS encryption is supported



► Specifications

<p>IP Input: Number: 1 Standard: MPEG-TS (RTP/UDP — SMPTE ST 2022) Supports: Unicast/multicast, IGMP V2/V3 and FEC Connector: RJ-45 10/100/1000GbE Max. Bit Rate: 200Mbps</p> <p>ASI Inputs: Number: 2, selectable (ASI 1 or ASI 2) Standard: DVB-ASI, MPEG-TS (188/204 bytes) Connectors: Mini DIN 1.0/2.3 Return Loss: >15dB</p> <p>ASI Output: Number: 1, selectable (ASI1, ASI2, IP or active stream) Standard: DVB-ASI, MPEG-TS (188/204 bytes) Connectors: Mini DIN 1.0/2.3 Return Loss: >15dB</p> <p>RF Outputs: L-Band Main: 1 L-Band Monitoring: 1 (-20dBm under the RF main output)</p>	<p>Connector: BNC or SMA (optional) Impedance: 50Ω Return Loss: >12dB P1dB: +20dBm Output Level: -45dBm to 0dBm (0.1 step) Frequency Range: 950-2150MHz (1 kHz step)</p> <p>Modulation: Symbol Rate: 1-68 Mbaud (1 baud step) Roll-Off Factor: 5-35% (1% step) Test Modes: Off, Dummy PL Frames and PRBS Carrier ID: DVB-CID — ETSI 103 129</p> <p>DVB-S/DSNG: Operation Mode: QPSK: 1/2, 2/3, 3/4, 5/6, 7/8 8PSK: 2/3, 5/6, 8/9 16QAM: 3/4, 7/8 Outer/Inner FEC: Reed Solomon/Viterbi</p> <p>DVB-S2: Operation Mode: QPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 8PSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10</p>	<p>Outer/Inner FEC: BCH/LDPC PL Scrambling Codes: 0, 264143 Modes: CCM, VCM, ACM Pilots insertion Frame Length: Short and normal frames Multi-Stream: 2x MPEG-TS over one carrier</p> <p>DVB-S2X Broadcast & DSNG Profiles (optional): <i>Same features and MODCODs as DVB-S2</i> DSNG Profile: 64APSK: 5/6, 4/5, 7/9, 11/15, 32/45 All new linear MODCOD for QPSK, 8PSK, 16/32/64APSK</p> <p>Configuration and Control: Web browser and VistaLINK® PRO via frame controller Front panel control SNMP over Ethernet</p> <p>Electrical: Voltage: +12VDC Power: 27W</p> <p>Physical (number of slots): 7800FR, 7801FR: 2</p>
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► Ordering Information

7780MD-LB	DVB-S/S2 modulator L-Band output
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Ordering Options

<p>+EBISS: +S2X: +S50:</p>	<p>License for BISS 1/E encryption License to enable DVB-S2X (Broadcast and DSNG profiles) modulation standards 50Ω SMA connectors</p>
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