

# 7882DM-LB Series

## DVB-S/S2/S2X Dual and Quad Satellite Demodulators



The 7882DM-LB series is a complete hardware-based solution for demodulating digital DVB-S/S2/S2X satellite signals. With a modular form-factor and available multiple inputs and multiple demodulators per card, the 7882DM-LB series represents one of the highest density and most flexible solutions in the industry.

Applications include signal reception for cable, DTH and IPTV providers, or any other small to large head-end operators who need to receive and redistribute satellite content. The 7882DM-LB 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

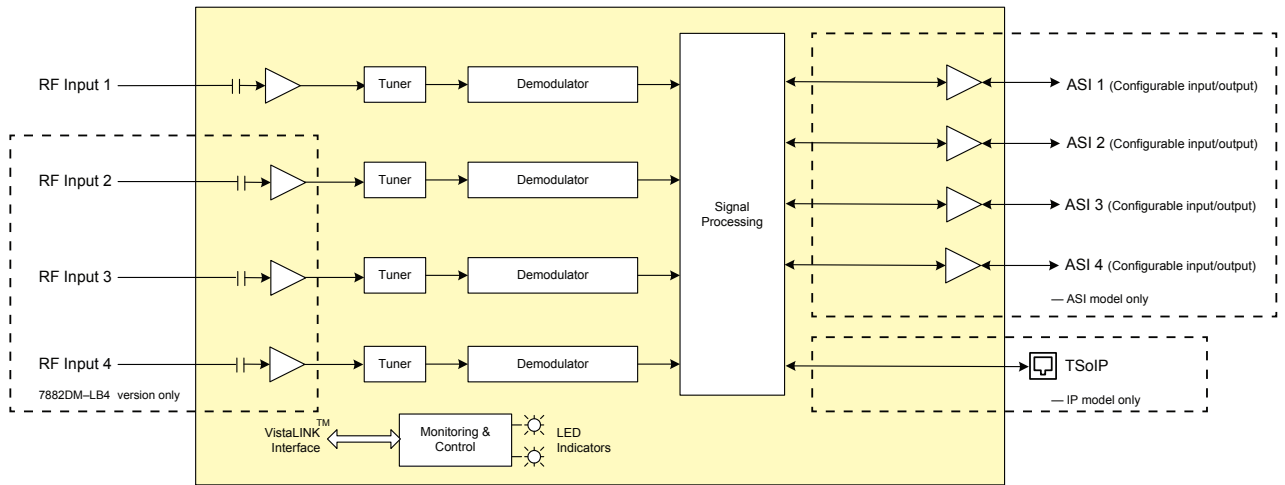
output, the demodulator may be coupled with an Evertz decoder module, providing a full IRD solution.

Monitoring parameters such as Es/N0, demodulator lock, RF power and FEC activity provide extensive information on received signal quality and robustness. These parameters as well as full control of the demodulator are relayed over SNMP, for convenient remote access using Evertz' own VistaLINK® PRO SNMP monitoring and control package.

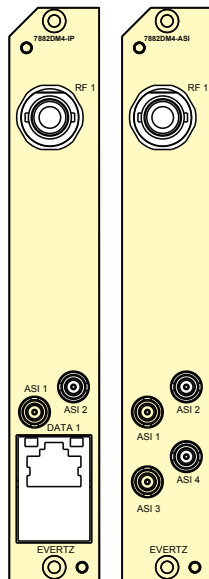
For applications that require decryption, 7882DM-CA provides CA slots for installation of customer supplied DVB-CI compliant conditional access modules.

### ► Features & Benefits

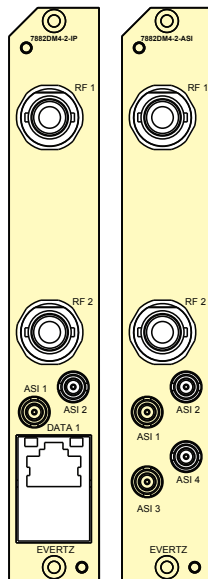
- DVB-S, DVB-S2, DVB-S2X capable
- Four DiSEqC 1.x compatible transmitter, 22-kHz
- One DiSEqC 2.x compatible receiver, 22-kHz
- Signal quality monitoring, including Es/N0, demodulator locking, RF power and FEC activity
- Outputs are selectable among internal demods
- Standard support for advanced transport stream processing including service filtering and output bitrate control
- Standard support for advanced modulation schemes, including DVB-S2/S2X with 16APSK, 32APSK and 64APSK
- Long frames and short frames
- CCM, VCM and ACM
- SCPC and MCPC support
- Automatic detection and configuration of modulation type, filter roll-off, symbol rate, pilot presence (on/off) and frame length
- Flexible transport stream processor: PID filtering and bitrate control
- Supports on-board Input auto-failover between various inputs including RF/ASI/ or IP inputs
- Optional IP FEC encoding in output streams (for -IP models)
- Optional BISS and BISS-E decryption



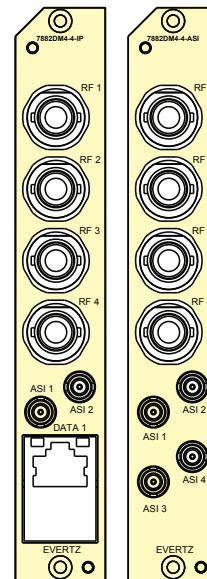
Single RF Input



Dual RF Input



Quad RF Input



The Complete Solution Provider



# 7882DM-LB Series

## DVB-S/S2/S2X Dual and Quad Satellite Demodulators

### Specifications

<p><b>RF Input:</b> Connector: F-Type BNC per IEC 61169-8 Annex A (with B75 option) Frequency: 950-2150MHz Input Power: -20 to -60dBm</p> <p><b>Modulation Support:</b> Symbol Rate: up to: QPSK, 8PSK, 16APSK: 64 Msps 32APSK: 51 Msps 64APSK: 43 Msps</p> <p><b>Coding Rates:</b> FECFRAME (normal) 64 800 (bits) DVB-S QPSK: 1/2, 2/3, 3/4, 5/6, 7/8 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 DVB-S2 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB-S2 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB-S2 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10  DVB-S2x QPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20 DVB-S2x 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10, 23/36, 25/36, 13/18 DVB-S2x 8APSK-L: 5/9, 26/45</p>	<p>DVB-S2x 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 (S2-MODCODs), 26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90 DVB-S2x 16APSK-L: 5/9, 8/15, 1/2, 3/5, 2/3 DVB-S2x 32APSK: 3/4, 4/5, 5/6, 8/9, 9/10, 32/45, 11/15, 7/9 DVB-S2x 32APSK-L: 2/3 DVB-S2x 64APSK: 11/15, 7/9, 4/5, 5/6 DVB-S2x 64APSK-L: 32/45</p> <p><b>FECFRAME (short) 16 200 (bits)</b> DVB-S2x QPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 11/45, 4/15, 14/45, 7/15, 8/15, 32/45 DVB-S2x 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 7/15, 8/15, 26/45, 32/45 DVB-S2x 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 7/15, 8/15, 26/45, 3/5, 32/45 DVB-S2x 32APSK-L: 2/3, 32/45</p> <p><b>ASI Inputs/ Outputs:</b> 4 Connector: Mini DIN 1.0/2.3 ASI ports are individually configurable to be either input or output</p> <p><b>TSolP Input/Output (-IP version only):</b> Connector: RJ-45, 10/100/1000Mbps Type: SMPTE ST 2022-1, -2 FEC: per SMPTE ST 2022 (output only)</p>	<p><b>Optional SMTPE ST 2022-1 FEC encoding with L&amp;D following the following range (+FEC Option):</b></p> <ul style="list-style-type: none"> <li>L*D ≤ 100</li> <li>1 ≤ L ≤ 20</li> <li>4 ≤ D ≤ 20</li> <li>if L &lt; 4, then D = 4 always</li> </ul> <p><b>Conditional Access Support for DVB Common Interface De-scrambling:</b> DVB-CI Slots: 2 Connector: PCMCIA dual slots Standard: DVB_CI EN50221 CA module: PC-Card type II Hot Plug</p> <p><b>Control:</b></p> <ul style="list-style-type: none"> <li>SNMP over Ethernet via FC</li> <li>Web browser via FC</li> </ul> <p><b>Monitored Parameters:</b></p> <ul style="list-style-type: none"> <li>Demodulator lock</li> <li>RF power</li> <li>Es/N0 ratio</li> <li>FEC activity</li> </ul> <p><b>Electrical:</b> Voltage: +12V DC Power: &lt; 24W EMI/RFI: Complies with FCC part 15, Class A EU EMC Directive</p>
--	--	---

Signal Type	Part Number	Inputs		Outputs		ASI*	RJ-45	Frame Slots	DVB-CI Slot
		Number of RF	TSolP	Tuner/Demodulator	TSolP				
DVBS / S2 / S2X	7882DM-LB2-CA-ASI	2	-	1	-	4 DIN	-	1	1
	7882DM2-LB4-CA2-ASI	4	-	2	-	4 DIN	-	1	2
	7882DM4-LB4-CA2-ASI	4	-	4	-	4 DIN	-	1	2

\* ASI ports are individually configurable to be either input or output

### Ordering Information

<b>7882DM-LB2-CA-ASI:</b>	Single-channel DVB S/S2/S2X demodulator with dual RF input, single Conditional Access slot and Quad ASI ports
<b>7882DM2-LB4-CA2-ASI:</b>	Dual-channel DVB S/S2/S2X demodulator with four RF input, dual Conditional Access slot and Quad ASI ports
<b>7882DM4-LB4-CA2-ASI:</b>	Quad-channel DVB S/S2/S2X demodulator with four RF input, dual Conditional Access slot and Quad ASI ports

**Ordering Options:** rear plate must be specified at time of order (eg. model +3RU)  
**7882DM-FK-S2X** License to enable DVB-S2X (Broadcast and DSNG profiles) demodulation standards; license is enabled per demod channel

<b>Rear Plate Suffix:</b> <b>+3RU</b>	3RU rear plate for use with 350FR, 7700FR-C, 7800FR, 7800FR-QT or 7801FR multiframe
<b>Enclosures:</b> <b>350FR</b> <b>7800FR</b> <b>7800FR-QT</b> <b>7801FR</b> <b>7801FR+IRDCP</b>	3RU portable multiframe, holds up to 7x single-slot modules 3RU multiframe, holds up to 15x single-slot modules 3RU multiframe, holds up to 15x single-slot module 1RU multiframe, holds up to 4x single- or 2x dual-slot modules 1RU multiframe with front control panel installed
<b>Accessories:</b> <b>+781PS</b> <b>7801FC</b>	Redundant power supply (optional) Frame controller module for use with 7801FRs