

# 7708VB-4-HSE

## Dual HD or Quad SD/ASI Transceiver with Ethernet

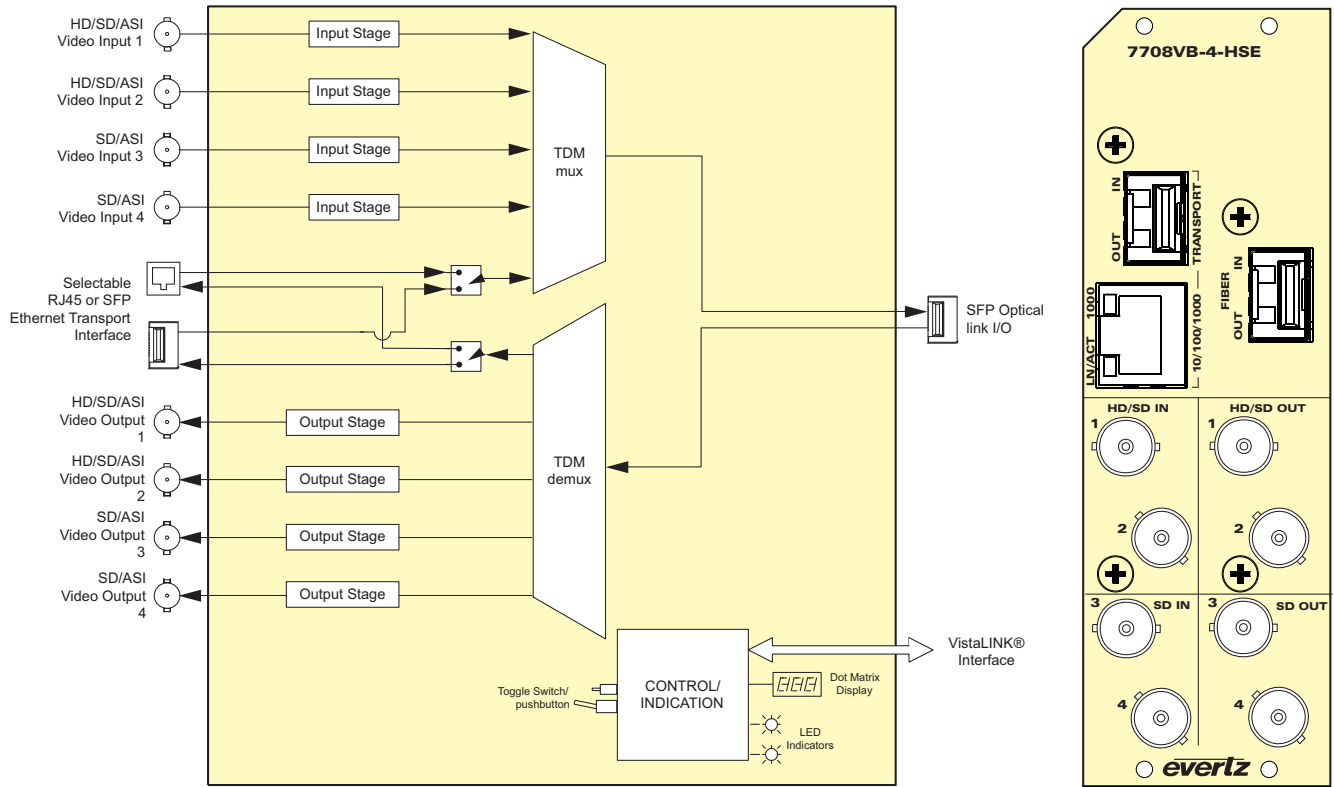


The 7708VB-4-HSE is part of the Evertz FacilityLINK™ series of Multiservice fiber transport products. Common applications include bi-directional transport of video plus Ethernet for purposes as simple as bringing back M&C data to full file-transfer or LAN extension. The 7708VB-4-1H-SE combines these

signal types and directions into a single product which utilizes a 1.485Gb/s link rate. This allows the use of economical HD-SDI local loop transport links, and expands their capabilities and value by adding the ability to transport HD-SDI or multiple SD-ASI signals and up to 1Gb/s Ethernet.

### ► Features & Benefits

- Bi-directional transport of two HD-SDI, four SD/ASI or one HD-SDI plus three SD/ASI signals plus Ethernet on a single card
- Ethernet transport connection may be RJ45 or optical when fitted with optional SFP optical modules (see ordering options)
- FBM (Flexible Bandwidth Management) controls Ethernet port data rate with respect to presence or absence of applied input video. 2.97 Gb/s transport link, min 30Mb/s Ethernet available with two input HD-SDI applied
- Signal transport uninterrupted by the application/loss of input signals
- Automatic coaxial input equalization up to 100m at 1.485Gb/s and 250m at 270Mb/s (Belden 1694)
- Fully hot-swappable from front of frame
- Optical output wavelengths of 1310nm and up to sixteen CWDM wavelengths (ITU-T G.694.2 compliant)
- VistaLINK® capable for remote monitoring via SNMP (using VistaLINK® PRO) when installed in 7800FR frame with a 7700FC VistaLINK® Frame Controller
- Occupies two card slots and can be housed in the 3RU 7800FR frame that has a 15 slot capacity, the portable 3RU 350FR frame that has a seven slot capacity or the 1RU 7801FR, which has a two module capacity



The Complete Solution Provider





### ► Specifications

#### Serial Video Input:

Number of Inputs: 4  
 Max capacity: Two HD-SDI, one HD-SDI plus three ASI/SD signals or up to 4 SDI and/or ASI signals  
 Standard:  
 Input 1-2: ST 292-1, SMPTE ST 259-C, DVB-ASI  
 Inputs 3-4: SMPTE ST 259-C, DVB-ASI  
 Connector: BNC per IEC 61169-8 Annex A  
 Equalization: Automatic to 100m @ 1.485Gb/s and 250m @ 270Mb/s with Belden 1694 or equivalent cable  
 Return Loss: > 15dB up to 1.5Gb/s

#### Serial Video Output:

Number of Outputs: 4  
 Standard:  
 Output 1-2: ST 292-1, SMPTE ST 259-C, DVB-ASI  
 Outputs 3-4: SMPTE ST 259-C, DVB-ASI  
 Connector: BNC per IEC 61169-8 Annex A  
 Signal Level: 800mV nominal  
 DC Offset: 0V ±0.5V  
 Rise/Fall Time:  
 1.485Gb/s: < 270ps  
 270Mb/s: 900ps nominal  
 Overshoot: < 10% of amplitude  
 Return Loss: > 12dB up to 1.5Gb/s  
 Wideband Jitter: < 0.2UI

#### Optical Link Output:

Number of Outputs: 1 per SFP  
 Connector: Female LC/UPC  
 Wavelengths:  
 Standard: 1310nm  
 CWDM: 1270nm - 1610nm  
 Output Power:  
 1310nm: -2dBm ±1dBm  
 CWDM: +3dBm +1dBm

#### Optical Link Input:

Number of Inputs: 1 per SFP  
 Connector: Female LC/UPC  
 Operating Wavelength: 1270nm-1610nm  
 Max Input Power: -1dBm  
 Optical Sensitivity:  
 Standard: -19dBm

#### Ethernet Input/Output:

Standard: IEEE 802.3 (10 Base T), IEEE 802.3u (100 Base TX), IEEE 802.3ab (1000 base TX)  
 Optical (when fitted with optional SFP):  
 Connector: SFP (duplex female LC/UPC)  
 Output:  
 Wavelengths:  
 Standard: 1310nm  
 CWDM: 1270nm - 1610nm

#### Output Power:

1310nm: -2dBm ±1dBm  
 CWDM: +4dBm ±1.5dBm

#### Input:

Operating Wavelength: 1270nm-1610nm  
 Max Input Power: -1dBm  
 Optical Sensitivity Standard:  
 -21dBm  
 High Sensitivity: -28dBm

#### Electrical:

Connector: RJ45  
 Cable Requirements:  
 10 BaseT: UTP category 3, 4 or 5 cable up to 328ft/100m (2 pairs)  
 100 BaseTX: UTP category 5 cable up to 328ft/100m (2 pairs)  
 1000 BaseTX: UTP category 5 cable up to 164ft/50m (4 pairs)

#### Electrical:

Voltage: +12VDC  
 Power: 13W

#### Physical (number of slots):

350FR: 2  
 7700FR-C: 2  
 7800FR: 2

### ► Ordering Information

**7708VB-4-HSE** Dual HD or Quad SD/ASI Transceiver with Ethernet, SFP's not included

#### Rear Plate Suffix +3RU

3RU Rear Plate for use with 350FR, 7700FR-C or 7800FR Multiframe

**Ordering Options** Rear Plate and Fiber Connector and SFP's must be specified at time of order (Eg: Model +SC +3RU)

#### Enclosures

**350FR**  
**7800FR**  
**7801FR**

3RU Portable Multiframe which holds up to 7 single slot modules  
 3RU Multiframe which holds up to 15 single slot modules  
 1RU Multiframe which holds up to 4 single or 2 dual slot modules

#### SFP for Ethernet or Optical Link

**SFPTR-13** SFP Transceiver, 1310nm, standard sensitivity receiver, supports rates up to 3Gb/s  
**SFPTR-Cxx** SFP Transceiver, CWDM, standard sensitivity receiver, supports rates up to 3Gb/s  
**SFPTR-CxxH** SFP Transceiver, CWDM, high sensitivity receiver, supports rates up to 3Gb/s