

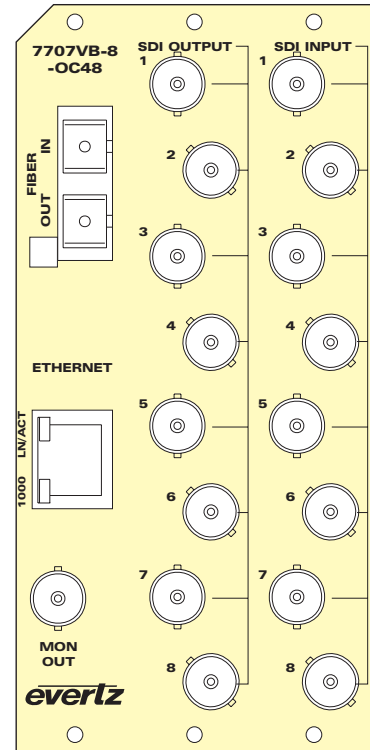
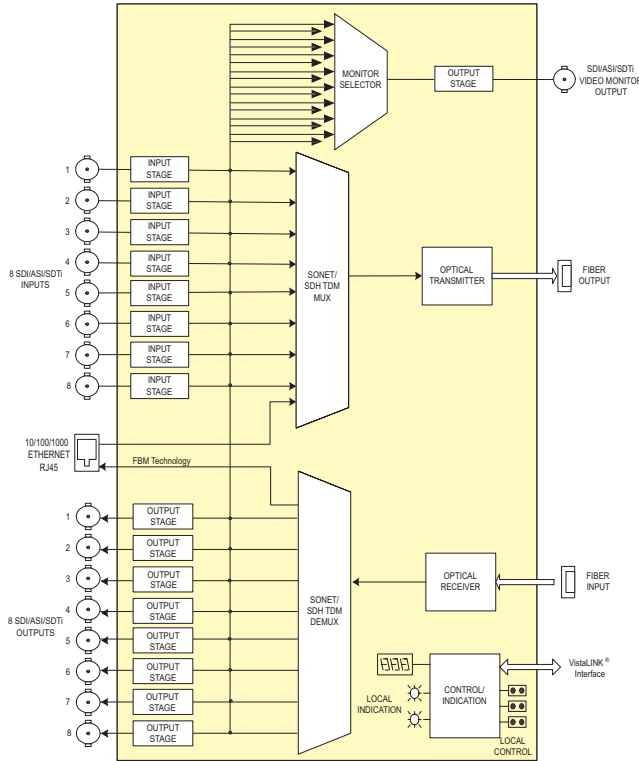
# 7707VB-8-OC48

## Eight Channel SDI + Ethernet SONET / SDH Fiber Transceiver



### ► Features & Benefits

- Transports signals over OC-48C/STM-16C data rates (2.488Gb/s)
- Single card TDM multiplexer for eight bi-directional asynchronous SD-SDI, SDTi and DVB-ASI signals
- Built-in Ethernet transceiver with one 10/100/1000 Base-T port with FBM (Fiber Bandwidth Management) technology
- Interfaces directly to SONET/SDH infrastructure
- Uncompressed, full-rate video transport
- Signal transport over fiber uninterrupted by loss of any input feed
- Transparently passes embedded AES or any other data in the horizontal or vertical ancillary data space
- Stratum 3 wander/holdover/jitter compliance
- Wide input frequency range tolerance ( $\pm 50$ ppm)
- Fully hot-swappable from front of frame
- Supports single-mode and multi-mode fiber optic cable (contact factory for multi-mode applications)
- Optical output wavelengths of 1310nm, 1550nm, and up to sixteen CWDM wavelengths (ITU-T G.694.2 compliant)
- DWDM wavelength (ITU-T G.694.1 compliant) support
- SC/PC, ST/PC, FC/PC connector options
- Comprehensive signal and card status monitoring via four digit card edge display or remotely through SNMP and VistaLINK®
- VistaLINK® capability is available when modules are used with the 3RU 7800FR or 350FR frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame
- Occupies three card slots and is housed in a 3RU frame that holds up to 5 modules or 350FR portable frame that holds up to 2 modules



### ► Specifications

#### Serial Video Input:

Standards: SMPTE 259M-C, DVB-ASI, SMPTE 305M (SDTi)  
 Number of Inputs: 8  
 Connector: 1 BNC per IEC 61169-8 Annex A  
 Equalization: Automatic to 250m @ 270Mb/s with Belden 1694A or equivalent cable  
 Return Loss: > 15dB up to 1.5Gb/s  
 Frequency Offset Tolerance:  $\pm 50$ ppm

#### Serial Video Output:

Standards: SMPTE 259M-C, DVB-ASI, SMPTE 305M (SDTi)  
 Number of Outputs: 8 (+1 monitor with user selectable source)  
 Connector: 1 BNC per IEC 61169-8 Annex A  
 Signal Level: 800mV nominal  
 DC Offset: 0V  $\pm 0.5$ V  
 Rise and Fall Time: 900ps nominal @ 270Mb/s  
 Overshoot: <10% of amplitude  
 Return Loss: >12dB  
 Wideband Jitter: <0.2 UI

#### Serial Video Monitor Output:

Standards: SMPTE 259M-C, DVB-ASI, SMPTE 305M (SDTi)  
 Number of Outputs: 1, signal user-selectable from the 8 inputs & 8 outputs  
 Connector: 1 BNC per IEC 61169-8 Annex A  
 Signal Level: 800mV nominal  
 DC Offset: 0V  $\pm 0.5$ V

Rise and Fall Time: 900ps nominal  
 Overshoot: < 10% of amplitude  
 Return Loss: > 12dB  
 Wideband Jitter: < 0.2 UI

#### Optical Output:

Standards: OC-48C/STM-16C  
 Number of Outputs: 1  
 Connector: Female SC/PC, ST/PC or FC/PC  
 Return Loss: > 14dB  
 Wideband Jitter: < 0.2 UI  
 Fiber Size: 9 $\mu$ m core/125 $\mu$ m overall  
 Wavelength:  
 Standard: 1310nm, 1550nm (nominal)  
 CWDM: 1270nm to 1610nm (See Ordering Information)  
 DWDM: C-Band (ITU-T G.694.1 Compliant) (See Ordering Information)  
 Power:  
 1310nm FP (Standard): -6dBm  $\pm 1$ dBm  
 1550nm & CWDM DFB: 0dBm  $\pm 1$ dBm  
 DWDM DFB: +7dBm  $\pm 1$ dBm

#### Optical Input:

Number of Inputs: 1  
 Standards: OC-48C/STM-16C  
 Connector: Female SC/PC, ST/PC or FC/PC  
 Return Loss: > 25dB  
 Wavelength: 1270nm to 1610nm

#### Maximum Input Power:

Standard: -1dBm  
 Optical Sensitivity:  
 Standard: -23dBm

#### Electrical:

Voltage: +12V DC  
 Power: 25W (non DWDM)  
 30W (DWDM)

#### Physical (number of slots):

350FR: 3  
 7700FR-C: 3  
 7800FR: 3

#### Compliance:

Laser Safety: Complies with 24 CFR 1040.10 and 1040.11  
 EMI/RFI: Complies with FCC regulations for Class A devices  
 Complies with EU EMC directive

## ►Ordering Information

**7707VB13-8-OC48** Eight Channel SDI + Ethernet SONET/SDH Fiber Transceiver, 1310nm FP laser, VistaLINK®

**7707VB15-8-OC48** Eight Channel SDI + Ethernet SONET/SDH Fiber Transceiver, 1550nm DFB laser, VistaLINK®

*For CWDM applications please refer to the end of the fiber section for details*

**7707VBxx-8-OC48** Eight Channel SDI + Ethernet SONET/SDH Fiber Transceiver, CWDM DFB laser, VistaLINK®

*For DWDM applications please refer to the end of the fiber section for details*

**7707VBDxxx-8-OC48** Eight Channel SDI + Ethernet SONET/SDH Fiber Transceiver, DWDM DFB laser, VistaLINK®

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

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

**Connector Suffix**  
**+SC** SC/PC  
**+ST** ST/PC  
**+FC** FC/PC

**Enclosures**  
**350FR** 3RU Portable Multiframe which holds up to 7 single slot modules  
**7700FR-C** 3RU Multiframe which holds up to 15 single slot modules  
**7800FR** 3RU Multiframe which holds up to 15 single slot modules  
**7801FR** 1RU Multiframe which holds up to 4 single or 2 dual slot modules

