

7708SFP, 7708SFP-2, 7708SFP-2-DIN, 7708SFP-4-DIN-A

Single, Dual, and Quad Fiber Optic SFP Card Module



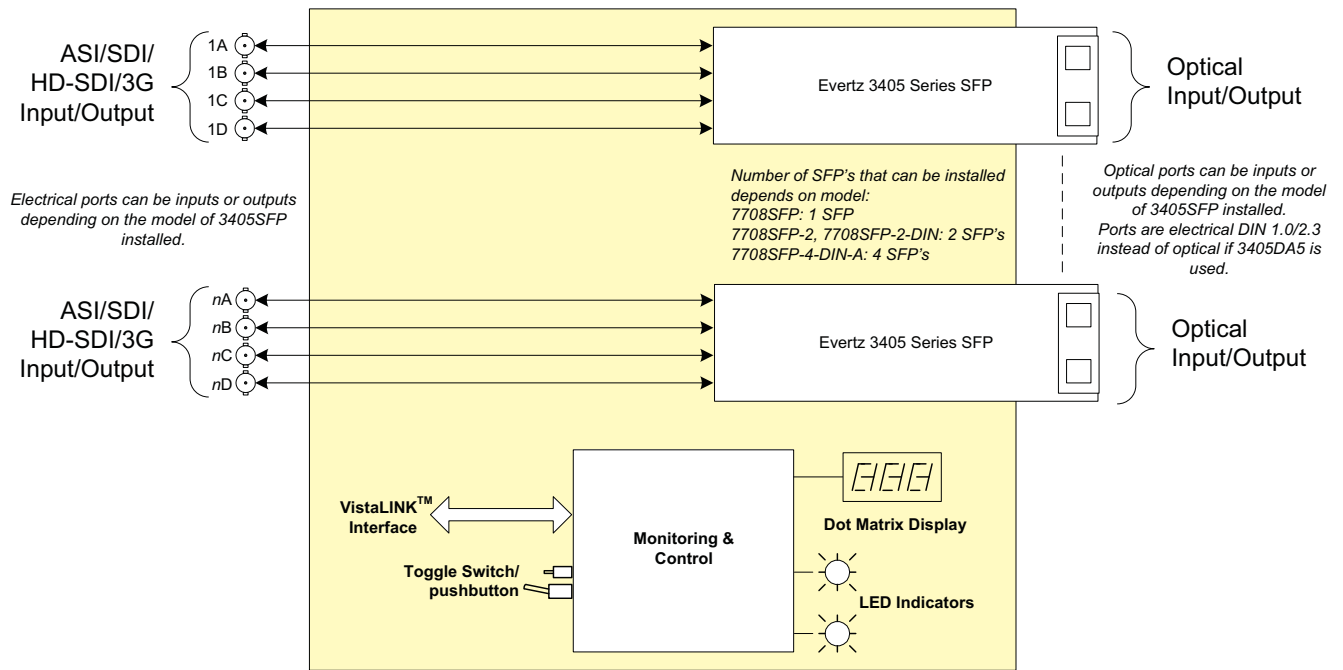
The Evertz 7708SFP series is a card-based equivalent to the 3405FR series fiber optic SFP frames. The 7708SFP series can accommodate any 3405 series SFP, allowing the SFP cages to be populated as needed with optical transmit, receive, regenerator or electrical distribution amplifier SFP's. Any combination of 3405SFP types may be used on the same card, making countless versatile combinations possible. Cards are available to hold one, two or four SFP's making them not only flexible, but also a very high-density and cost-effective solution for constructing modern fiber optic infrastructures. Benefits of fiber optics for video transport include longer attainable distances, smaller/lighter cabling, reduced cable tray loads and electrical isolation. The 7708SFP series provides a low-overhead means for simple electrical/optical conversion for interfacility transport, as well as overcoming the limitations imposed by coaxial cable in intra-facility applications.

3405 series SFP's are able to handle ASI, SDI, HD-SDI and 3G digital video signals, as well as other signal rates up to 3 Gig on non-reclocked versions (e.g. MADI). The SFP modules are hot-swappable on the rear panel, allowing for quick servicing or easy reconfiguration or expansion at any time. 16 CWDM wavelengths are also available, which when combined with Evertz CWDM products allow up to 16 signals to be multiplexed on to a single fiber, greatly conserving fiber usage.

The 7708SFP modules support full remote monitoring and control over SNMP/VistaLINK® when used in conjunction with an Evertz frame with frame controller module. Numerous parameters such as optical power and electrical signal presence and rate can be accessed remotely to monitor system integrity.

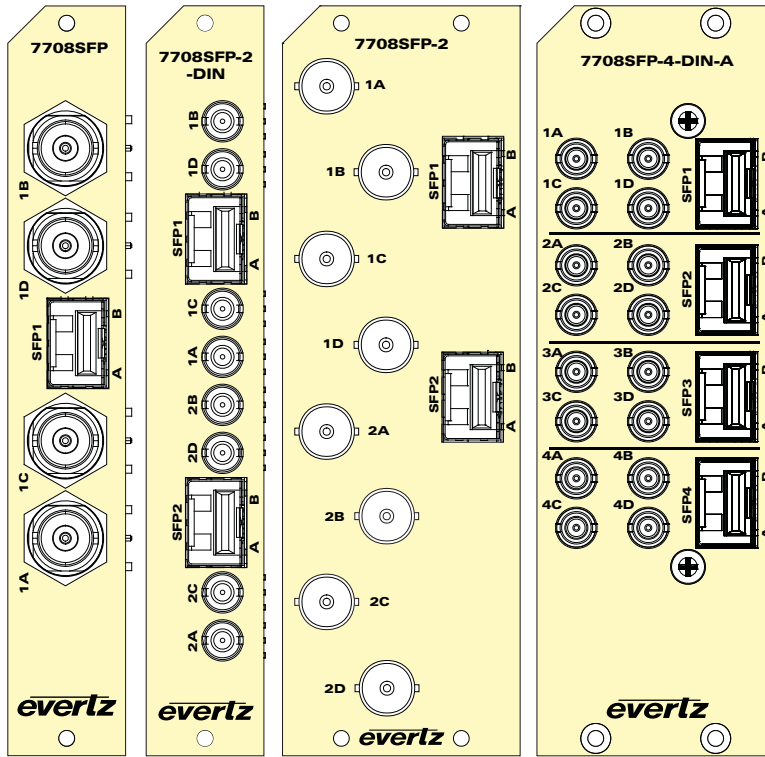
► Features & Benefits

- Models available to hold one, two or four SFP's to suit different capacity requirements
- Models available with BNC or DIN 1.0/2.3 connectors to suit different density or connector preferences
- Any combination of 3405SFP types may be installed in a single card, including optical transmit, receive, regenerator and electrical distribution amplifiers
- SFP modules are hot-swappable from the rear plate
- 7708SFP card modules are hot swappable through the front of the frame
- Comprehensive signal and card status monitoring via four digit card edge display or remotely through SNMP and VistaLINK® when used in conjunction with an Evertz frame controller module

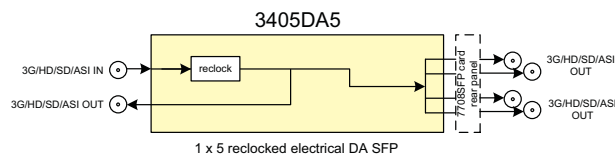
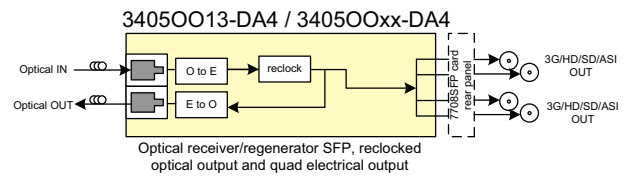
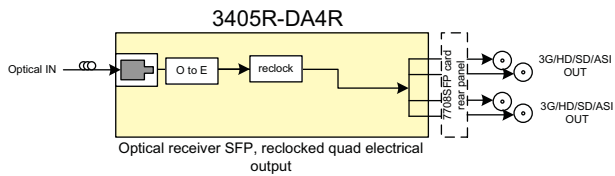
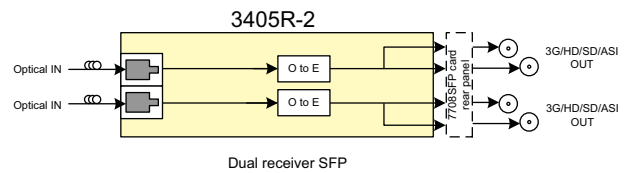
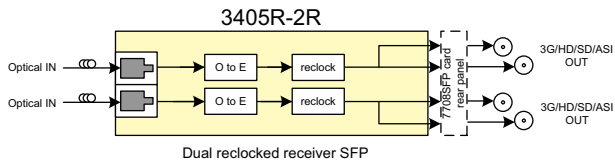
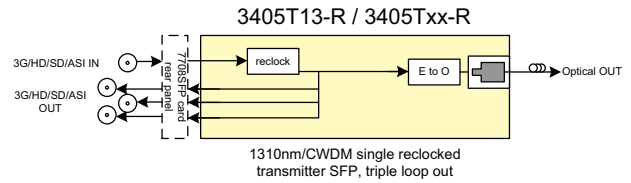
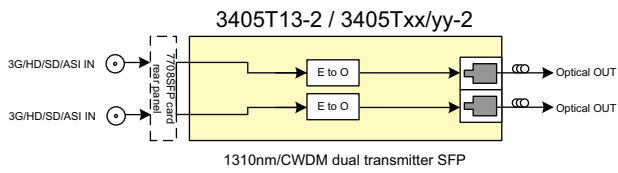


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SFP Options



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Single, Dual, and Quad Fiber Optic SFP Card Module



Specifications

System:		Electrical Inputs:		Reclocked Electrical Outputs:	
Density:		Reclocked Standard:	SMPTE 424M (3 Gb/s), SMPTE 292M (1.5Gb/s), SMPTE 259M (270Mb/s), DVB-ASI	Signal Level:	800mV (nominal)
7708SFP:	1 SFP module			DC Offset:	0V +/-0.5V
7708SFP-2:	Up to 2 SFP modules	Connector:		Rise and Fall Time:	
7708SFP-2-DIN:	Up to 2 SFP modules	7708SFP:	BNC per IEC 61169-8 Annex A	HD/3G:	< 135ps
7708SFP-4-DIN-A:	Up to 4 SFP modules	7708SFP-2:	BNC per IEC 61169-8 Annex A	SD:	< 900ps
Impedance:	75Ω	7708SFP-2-DIN:	DIN 1.0/2.3	Overshoot:	< 10% of amplitude
Connector:		7708SFP-4-DIN-A:	DIN 1.0/2.3	Alignment Jitter:	< 0.2UI (Reclocked) to 1.485Gb/s < 0.3UI (Reclocked) to 2.97Gb/s
7708SFP:	BNC per IEC 61169-8 Annex A	Equalization:	Automatic to 80m @ 3 Gb/s 100m@ 1.5Gb/s 250m @ 270Mb/s (with Belden 1694A or equivalent)	Compliance:	
7708SFP-2-DIN:	DIN 1.0/2.3			Laser Safety:	Class 1 laser product, Complies with 24 CFR 1040.10 and 1040.11, IEC 60825-1
Optical Output:		Return Loss:	> 15dB up to 1.5GHz > 10dB up to 3GHz	EMI/RFI:	Complies with FCC part 15, Class A Complies with EU EMC Directives
Number of Outputs:	Up to 2 per SFP	Electrical Outputs:		Physical (number of slots):	
Connector:	LC/UPC	Connector:		7708SFP:	1
Rise/Fall Time:	<270ps	7708SFP:	BNC per IEC 61169-8 Annex A	7708SFP-2:	2
Optical Power:		7708SFP-2:	BNC per IEC 61169-8 Annex A	7708SFP-2-DIN:	1
Standard:	-2dBm +/-1dBm	7708SFP-2-DIN:	DIN 1.0/2.3	7708SFP-4-DIN-A:	2
CWDM:	+3.5dBm +/-1dBm	7708SFP-4-DIN-A:	DIN 1.0/2.3	Electrical:	
Wavelength:		Impedance:	75Ω (nominal)	Voltage:	+12V DC
Standard:	1310nm	Return Loss:	>15dB to 1.5GHz >10dB to 3GHz	Power:	11W
CWDM:	1270nm to 1610nm (ITU-T G.694.2 compliant)	Optical Input:			
Optical Input:		Number of Inputs:	Up to 2 per SFP		
Connector:	LC/UPC	Connector:	LC/UPC		
Operating Wavelength:	1270nm to 1610nm	Operating Wavelength:	1270nm to 1610nm		
Maximum Input Power:		Standard:	-1dBm		
Standard:	-1dBm	Optical Sensitivity:			
Optical Sensitivity:		Standard:	-21dBm at 2.97Gb/s pathological Level A -23dBm at 2.97Gb/s color bars		

Ordering Information

7708SFP	Single Fiber Optic SFP card module with BNC I/O
7708SFP-2	Dual Fiber Optic SFP card module with BNC I/O
7708SFP-2-DIN	Dual Fiber Optic SFP card module with DIN 1.0/2.3 I/O
7708SFP-4-DIN-A	Quad Fiber Optic SFP card module with DIN 1.0/2.3 I/O

Ordering Options Rear Plate must be specified at time of order
(Eg: Model +3RU)

**Note: SFP's sold separately, please specify at the time of ordering.
Multimode applications require a 5dB optical attenuator at the output of all transmitting
ports, except when "-S" short haul version transmitter SFP's are used.*

Evertz SFP modules

3405T13-2	3G/HD/SD dual 1310nm SFP transmitters, Non-reclocking
3405T13-2-S	3G/HD/SD dual 1310nm SFP transmitter, non-reclocking, short-haul
3405Txx/yy-2	3G/HD/SD dual CWDM SFP transmitters, Non-reclocking
3405T13-R	3G/HD/SD reclocked 1310nm SFP transmitter. Reclocked electrical loop output
3405T13-R-S	3G/HD/SD 1310nm reclocked SFP transmitter, short-haul, reclocked electrical loop output

3405Tx-R	3G/HD/SD reclocked CWDM SFP transmitter. Reclocked electrical loop out
3405R-2	3G/HD/SD dual SFP receiver, Non-reclocking
3405R-2R	3G/HD/SD dual reclocked electrical outputs
3405R-DA4R	3G/HD/SD single reclocked SFP receiver, quad electrical outputs
3405OO13-DA4	3G/HD/SD reclocked SFP receiver. Reclocked 1310 optical loop output and reclocked electrical outputs
3405OOxx-DA4	3G/HD/SD reclocked SFP receiver. Reclocked CWDM optical loop output and reclocked electrical outputs
3405DA5	3G/HD/SD distribution amplifier, reclocked

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-C	3RU Multiframe which holds up to 15 single slot modules
7801FR	1RU Multiframe which holds up to 4 single or 2 dual slot modules
7701FR	1RU Multiframe which holds up to 3 single slot modules
S7701FR	Standalone Enclosure