

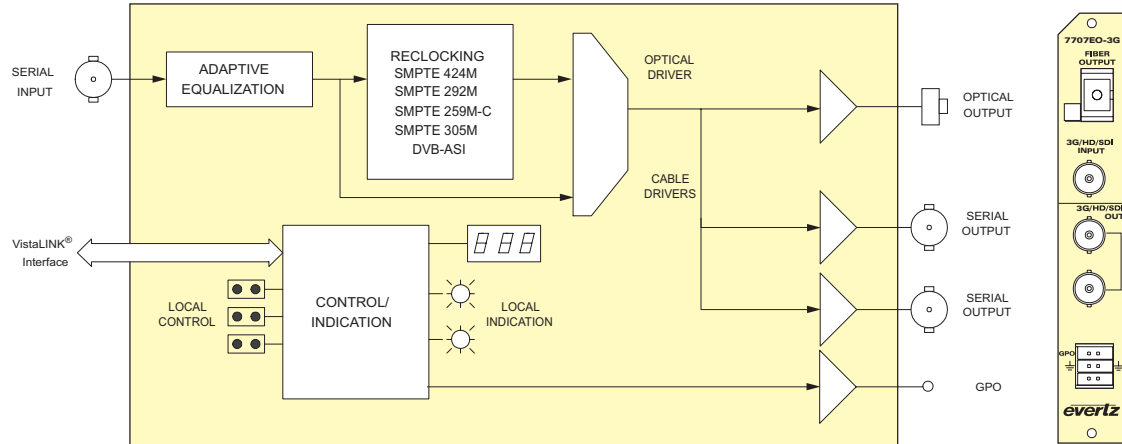
# 7707EO-3G

## 3G/HD/SD Electrical to Optical Converter



### Features & Benefits

- Supports all SMPTE ST 424M standards at 2.970Gb/s
- Supports all SMPTE ST 292-1 standards at 1.485Gb/s
- Supports SMPTE ST 259-C standards at 270Mb/s
- Supports DVB-ASI (270Mb/s) and SMPTE ST 305M (SDTi) rates
- Auto rate selection, indication and reclocking for SD-SDI/HD/3G data rates from 270Mb/s to 2.970Gb/s
- Selectable non-reclock mode for other data rates
- Programmable general purpose output (GPO)
- Automatic input equalization up to 100m to 1.5Gb/s, 250m to 270Mb/s and 70m to 3Gb/s
- Optical output wavelengths of 1550nm and up to sixteen CWDM wavelengths (ITU-T G.694.2 compliant)
- Supports single-mode and multi-mode fiber optic cable (contact factory for multi-mode applications)
- Fully hot-swappable from front of frame
- Comprehensive signal and card status monitoring via four-digit card edge display or remotely through SNMP and VistaLINK® PRO
- VistaLINK® capability is available when modules are used with a 3RU frame and a 7700FC VistaLINK® frame controller module in Slot 1 of the frame
- Occupies one card slot and can be housed in either a 1RU frame that holds up to three modules, a 3RU frame that holds up to 15x modules, or a standalone enclosure, which holds one module



### Specifications

#### Serial Video Input:

Standards:	SMPTE ST 424M, ST 292-1, SMPTE ST 259-C, SMPTE ST 305M, DVB-ASI
Reclocked:	Any bi-level signal type at rates of 270Mb/s to 2.970Gb/s
Non-Reclocked:	Any bi-level signal type at rates of 270Mb/s to 2.970Gb/s
Connector:	1 BNC per IEC 61169-8 Annex A
Equalization:	Automatic to 100m @ 1.485Gb/s, 70m @ 3Gb/s with Belden 1694A or equivalent cable and 250m @ 270Mb/s with Belden 8281 or equivalent cable
Return Loss:	> 15dB to 1.5GHz > 10dB to 3GHz

#### Serial Video Outputs:

Number of Outputs:	2 per card (>10dB to >3GHz)
Connector:	BNC per IEC 61169-8 Annex A
Signal Level:	800mV ±80mV
DC Offset:	0V ±0.5V
Rise and Fall Time:	< 135ps (HD/3G) < 900ps (SD)

Overshoot:	< 10% of amplitude
Return Loss:	> 15dB to 1.5GHz > 10dB to 3GHz
Alignment Jitter:	< 0.2 UI (Reclocked) to 1.485Gb/s < 0.3 UI (Reclocked) to 2.97Gb/s

<b>Optical Output:</b>	
Standard:	SMPTE ST 297M
Number of Outputs:	1
Connector:	Female SC/PC, ST/PC or FC/PC
Return Loss:	> 14dB
Rise and Fall Time:	< 135ps (HD/3G) < 900ps (SD)
Alignment Jitter:	< 0.2 UI (Reclocked) to 1.485 Gb/s < 0.3 UI (Reclocked) to 2.97Gb/s
Wavelengths:	See <i>Ordering Information</i>
Output Power:	0dBm ± 1dBm

#### General Purpose Outputs:

Type:	Dry contact relay closure (normally open)
Number of Outputs:	1
Connector:	Multi-pin removable terminal block
Max. Current:	500mA @ 12V

#### Electrical:

Voltage:	+12V DC
Power:	8W
EMI/RFI:	Complies with FCC Part 15, Class A EU EMC Directive

#### Physical (Number of Slots):

350FR:	1
7700FR-C:	1
7800FR:	1

#### Compliance:

Electrical Safety:	CSA Listed to UL 60065-03, IEC 60065 Complies with CE low voltage Directive Class 1 laser product Complies with 24 CFR 1040.10 and 1040.11 IEC 60825-1 Complies with FCC Part 15, Class A EU EMC directive
Laser Safety:	Class 1 laser product Complies with 24 CFR 1040.10 and 1040.11 IEC 60825-1 Complies with FCC Part 15, Class A EU EMC directive
EMI/RFI:	Complies with FCC Part 15, Class A EU EMC directive

### Ordering Information

7707EOxx-3G	3G/HD/SD electrical to optical converter, CWDM DFB laser
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**Ordering Options:** rear plate and fiber connector must be specified at time of order (eg: Model +SC +3RU)

<b>Rear Plate Suffix:</b>	
+3RU	3RU rear plate for 350FR, 7700FR-C or 7800FR multiframe
+1RU	1RU rear plate for use with 7701FR multiframe
+SA	Standalone enclosure rear plate

#### Connector Suffix:

+SC	SC/PC
+ST	ST/PC
+FC	FC/PC

#### Accessories:

**Fiber Optic Patch Cable**  
See *CWDM Ordering Information page*

#### Enclosures:

350FR	3RU portable multiframe, holds up to 7x single-slot modules
7700FR-C	3RU multiframe, holds up to 15x single-slot modules
7701FR	1RU multiframe, holds up to 3x single- or dual-slot modules
7800FR	3RU multiframe, holds up to 15x single-slot modules
7801FR	1RU multiframe, holds up to 4x single- or 2x dual-slot modules
S7701FR	Standalone enclosure

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