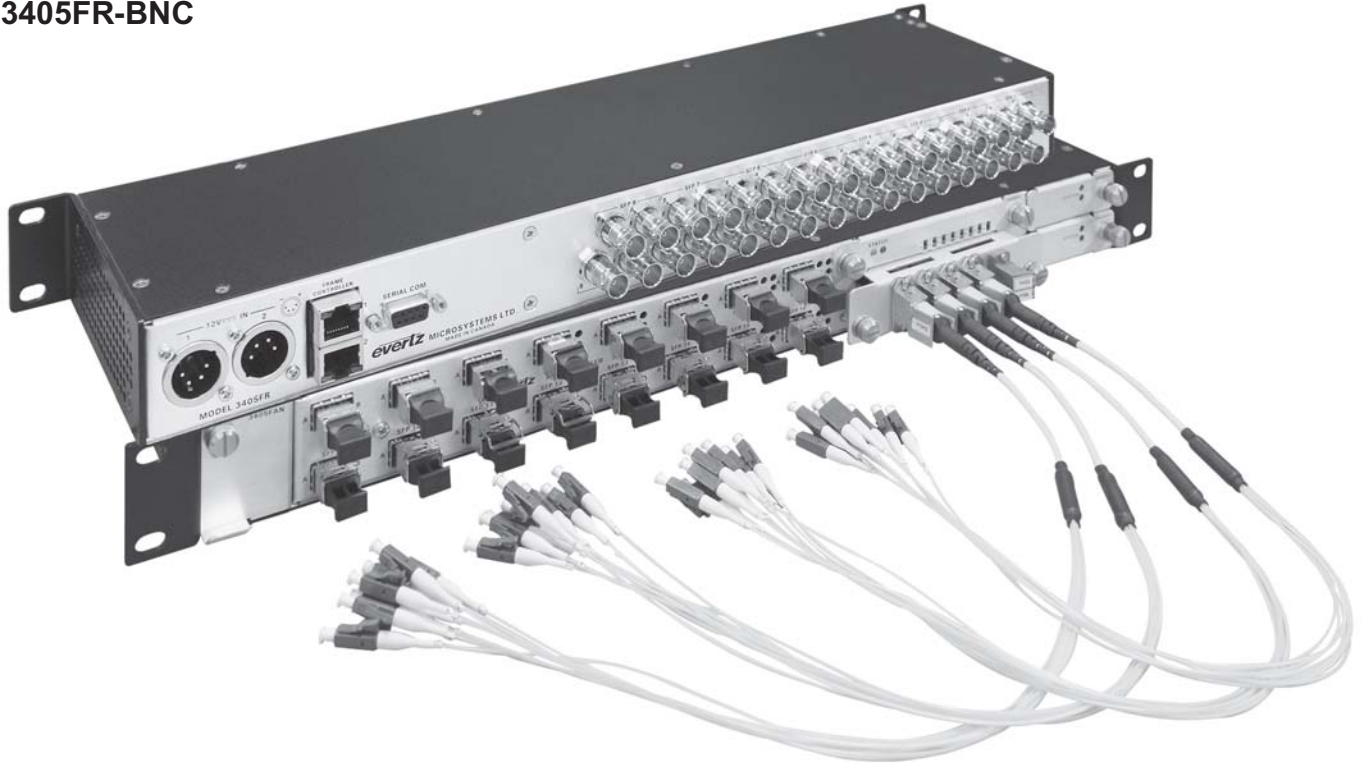


# 3405FR-BNC

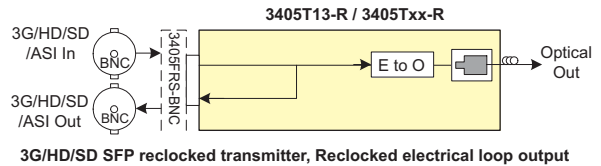
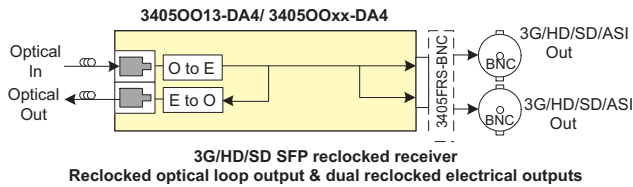
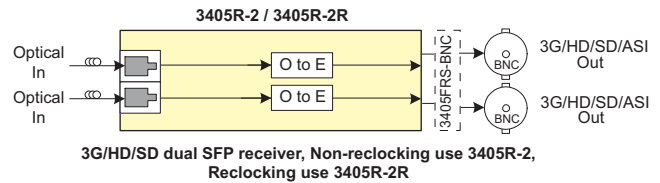
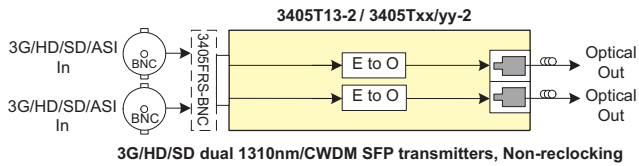
Fiber Optic SFP BNC Frame



## 3405FR-BNC



### SFP Options



The Evertz® 3405FR-BNC SFP frame is the ideal solution for today's low cost, high density fiber optic distribution needs. The 3405FR-BNC provides the flexibility to handle the high-speed requirements of 3G and HDTV as well as SD-SDI, SDTi, and DVB-ASI.

All components are hot swappable through the front of the frame including SFPs, frame controllers, multiplexers, and power converters. This ensures the unit can be fully serviceable in the field without having to be de-cabled or removed from the customer's rack.

The 3405FR-BNC is a 1RU frame designed to house up to 16 Evertz® SFP modules. This provides up to 32 EO or 32 OE in a single rack unit of space. The frame can be configured for a mixture of modules. See SFP options above.

The 3405FR-BNC can be powered by external power bricks or with the 3405PS-6. The 3405PS-6 can power up to 6 x 3405FR-BNC frames with primary & secondary power.

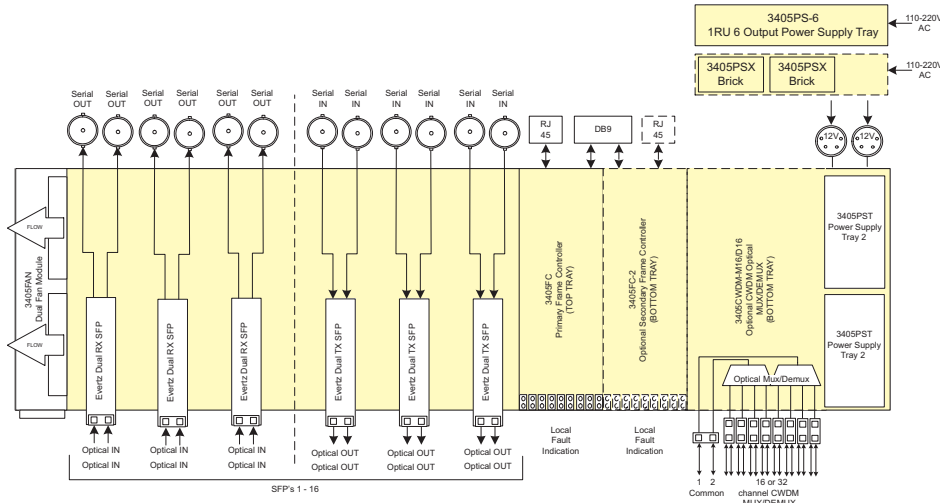
The 3405FR-BNC is VistaLINK® -capable with support for primary and secondary frame controller.

The 3405FR-BNC frame comes with a 3405FAN fan module and 2 x 3405PT power trays. SFPs, frame controllers, power supplies and MUX/DEMUX modules must be ordered separately. Please see ordering information.

### ► Features & Benefits

- Dual Power supplies (primary and redundant) and conversion trays (front extractable)
- Houses up to 16 front loading Evertz® SFP modules
- Each slot can be used as an input or output based on SFP type
- Dual primary & secondary 3405FC Frame Controllers for full VistaLINK® SNMP control and monitoring
- No electrical re-cabling required when hot swapping SFP modules

- Power options include external 12V power supply bricks or 1RU power supply tray which will power up to 6 x 3405FR-BNC units with redundancy
- Optional bi-directional single or dual Mux/Demux of up to 16 wavelengths in the 1270nm to 1610nm spectrum (ITU-T G.694.2 compliant)
- MTP to LC/UPC fanout cable for convenient fiber connection from Evertz SFPs to Mux/Demux modules



\*\*Note: Optional redundant frame controller (3405FC-2) cannot be used simultaneously with the 3405CWM-M16/D16 unit

### Specifications (NOTE: Electrical input & output specs only apply to reclocking SFP modules(3405T13-R & 3405OO13-DA4))

<b>System:</b> Density: Up to 32 EO, OE, or mixture of EO and OE in a 1RU unit Impedance: 75Ω Connector: BNC per IEC 61169-8 Annex A (F-type connector optional)		<b>Electrical Inputs:</b> Reclocked Standard: SMPTE 424M (3 Gb/s), SMPTE 292M (1.5Gb/s), SMPTE 259M (270Mb/s), DVB-ASI Connector: 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) Return Loss: > 15dB up to 1.5GHz > 10dB up to 3GHz		Max Power: Dissipation: 250 W (primary) 250 W (secondary) Status Indicators: Green OK LED, Red Fault LED	
<b>Communication and Control:</b> Serial: RS-232 - single Female 9-pin D connector Ethernet: SNMP over IEEE 802.3/U (10/100 BaseTx) RJ45 connector Control: VistaLINK®		<b>Electrical Outputs:</b> Connector: BNC per IEC 61169-8 Annex A Impedance: 75Ω (nominal) Signal Level: 800mV (nominal) 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: < 0.2UI (Reclocked) to 1.485Gb/s < 0.3UI (Reclocked) to 2.97Gb/s		<b>Connector:</b> Power: 4 PIN XLR (12V DC) Status Indicators: PSU status LEDs (each per power supply tray) Fuses: 5 amp, time delay- 1 per power supply tray	
<b>Optical Output:</b> Number of Outputs: Up to 2 per SFP Connector: LC/UPC Rise/Fall Time: <270ps Optical Power: Standard: -2dBm +/-1dBm CWDM: +3.5dBm +/-1dBm Wavelength: Standard: 1310nm 1270nm-1610nm CWDM: ITU-T G.694.2 compliant		<b>3405PSX External Power Supply Brick:</b> AC Mains Input: Auto ranging, 100 - 240 VAC, 50/60 Hz Number of Outputs: 1 Output Voltage: 12VDC Output Connector: 4 PIN XLR Max Power Dissipation: 120 W Status Indicators: Green OK LED		<b>Physical:</b> Dimensions: 1.8"H x 19"W x 4.16"D Module Capacity: 16 Evertz® SFP modules. Dual TX or Dual RX Operating Temperature 0-50°C (with 3405FAN installed) 0-30°C (with 3405FAN-Q installed)	
<b>Optical Input:</b> Number of Inputs: Up to 2 per SFP Connector: LC/UPC Operating Wavelength: 1270nm to 1610nm Maximum Input Power: Standard: -1dBm Optical Sensitivity: Standard: -21dBm at 2.97Gb/s pathological Level A -23dBm at 2.97Gb/s color bars		<b>3405PS-6:</b> AC Mains Input: Auto ranging, 100 - 240 VAC, 50/60 Hz Number of Outputs: 12 (6 primary, 6 secondary) Output Voltage: 12VDC Output Connector: 4 PIN XLR		<b>Electrical:</b> Power Supply Configuration: Dual external supplies (primary/secondary 3405PSX) 1RU Power Supply Tray (3405PS-6) DC input 12V DC (external power supplies required for 110-220V) Max Power Consumption: 40W (fully loaded frame with all accessories) Note - power consumption dependent on SFP type	
<b>Ordering Options:</b> +Q 3405FAN-Q Dual quiet fan option  Note: Order one of the power supply options from below <b>Power Supplies:</b> 3405PSX External power supply brick 3405PS-6 1RU 6 output power supply tray for 3405FR-BNC (powers up to 6 units - primary & secondary)		<b>3405R-2</b> 3G/HD/SD dual SFP receiver. Non-reclocking <b>3405T13-R</b> 3G/HD/SD Reclocked SFP transmitter. Reclocked electrical loop output <b>3405OO13-DA4</b> 3G/HD/SD Reclocked SFP receiver. Reclocked optical loop output and dual reclocked electrical outputs Note: xx/yy versions include the following, 27/29, 31/33, 35/37, 43/45 - Low Band 47/49, 51/53, 55/57, 59/61 - High Band		<b>Compliance:</b> Safety: CSA Listed, Complies with EU Safety Directive EMC: Complies with FCC part 15, Class A Complies with EU EMC Directives	

### Ordering Information

**3405FR-BNC** Fiber Optic SFP BNC frame (does not include power supplies, SFPs, frame controllers, Mux/Demux modules or Mux/Demux fanout cables)

**Ordering Options:**  
 +Q 3405FAN-Q Dual quiet fan option  
 Note: Order one of the power supply options from below

**Power Supplies:**  
 3405PSX External power supply brick  
 3405PS-6 1RU 6 output power supply tray for 3405FR-BNC (powers up to 6 units - primary & secondary)

**Accessories:**  
 3405FC 3405 Frame controller  
 3405FC-2 Redundant Frame controller  
 3405PST Power supply tray  
 3405FAN 3405FR-BNC dual FAN module  
 3405FAN-Q 3405FR-BNC dual quiet FAN module

**Evertz SFP modules:**  
 3405T13-2 3G/HD/SD dual 1310nm SFP transmitters. Non-reclocking  
 3405Tx/yy-2 3G/HD/SD dual CWDM SFP transmitters. Non-reclocking

**3405R-2** 3G/HD/SD dual SFP receiver. Non-reclocking  
**3405T13-R** 3G/HD/SD Reclocked SFP transmitter. Reclocked electrical loop output  
**3405OO13-DA4** 3G/HD/SD Reclocked SFP receiver. Reclocked optical loop output and dual reclocked electrical outputs  
 Note: xx/yy versions include the following, 27/29, 31/33, 35/37, 43/45 - Low Band  
 47/49, 51/53, 55/57, 59/61 - High Band

**Fiber Optic Mux/Demux Modules(MTP to LC fanout cable not included):**  
 3405CWDM-2-M16 Dual 16 Channel Mux, 1270nm to 1610nm  
 3405CWDM-2-D16 Dual 16 Channel Demux, 1270nm to 1610nm  
 3405CWDM-M16 16 Channel Mux, 1270nm to 1610nm  
 3405CWDM-D16 16 Channel Demux, 1270nm to 1610nm  
 Note: 3405CWDM-2-M16/D16 requires 2 x CB-MTP40CM-LCPC-HB & 2 x CB-MTP40CM-LCPC-LB for full 32ch connectivity  
 3405CWDM-M16/D16 requires 1 x CB-MTP40CM-LCPC-HB & 1 x CB-MTP40CM-LCPC-LB for full 16ch connectivity

**Fanout Cables:**  
**CB-MTP40CM-LCPC-HB** MTP to LC/UPC fanout cable for HIGH band CWDM wavelengths, 1470nm to 1610nm  
**CB-MTP40CM-LCPC-LB** MTP to LC/UPC fanout cable for LOW band CWDM wavelengths, 1270nm to 1450nm