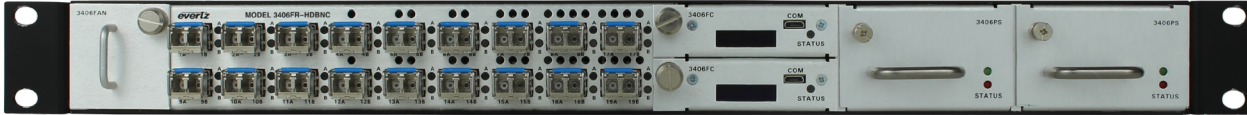


# 3406FR-HDBNC

Fiber Optic SFP HD-BNC Frame



Evertz' 3406FR-HDBNC is a high-capacity bulk optical conversion platform. With the ability to accommodate 16x Evertz 3406/3405 series SFPs, up to 32x optical-to-electrical or electrical-to-optical conversions may be performed in a single frame. Four additional MSA-compliant copper or fiber SFPs (coax/fiber video or Ethernet) are available for additional conversion flexibility. Occupying only 1RU, the 3406FR-HDBNC is ideal for space-limited applications.

The 3406FR-HDBNC can accommodate any 3406/3405 series SFP, allowing the SFP cages to be populated as needed with optical transmit, receive, regenerator or electrical distribution amplifier SFPs. The SFP positions are not limited by function — any combination of 3406/3405 SFP types may be used, making countless versatile combinations possible. Benefits of fiber optics for video transport include longer attainable distances, smaller/lighter cabling, reduced cable tray loads and electrical isolation. The 3406FR-HDBNC 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.

3406/3405 series SFPs are able to handle ASI, SDI, HD-SDI, 3G and 12G digital video signals, as well as other signal rates up to 12G on non-reclocked versions (e.g. MADI). The SFP modules are hot-swappable, allowing for quick servicing or easy reconfiguration or expansion at any time. Eighteen CWDM wavelengths are also available, which when combined with Evertz CWDM products allow up to 18x signals to be multiplexed on to a single fiber, greatly conserving fiber usage.

The 3406FR-HDBNC supports full remote monitoring and control through an easy-to-use web browser and/or SNMP/VistaLINK® when optional frame controllers are installed. The platform supports a single frame controller, or dual modules may be installed for redundancy. Numerous parameters such as optical power and electrical signal presence and rate can be accessed remotely to monitor system integrity.

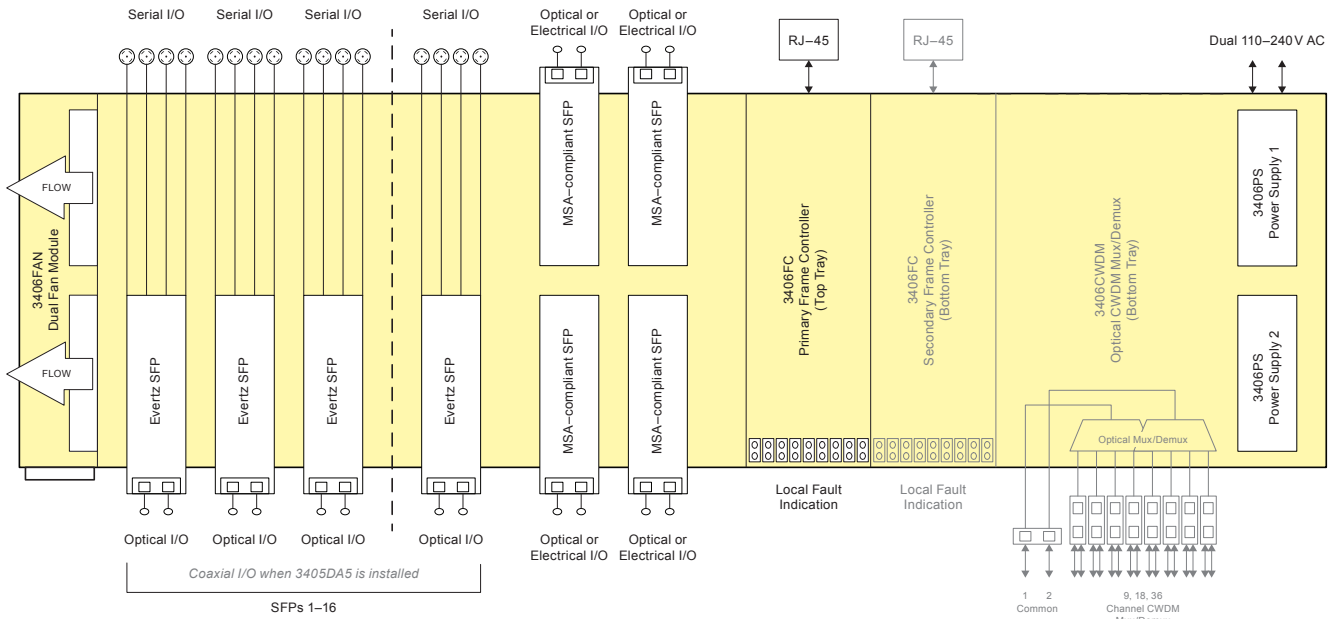
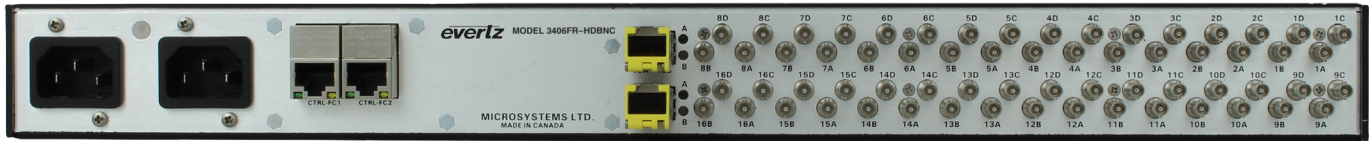
The 3406FR-HDBNC was designed to provide carrier-grade reliability with all SFPs, power supplies, frame controllers and the fan module being hot-swappable. There are no active components in the frame itself, a patented feature from Evertz ensuring that the frame and coaxial cabling never need to be removed from the rack for service. The 3406FR-HDBNC frame accommodates main and redundant AC inlet power supply modules.

## Features & Benefits

- High density: up to 32x 12G/3G/HD/SD/ASI video over fiber conversions in 1RU
- 4x additional MSA-compliant SFP slots for fiber to fiber, fiber to coax, fiber to RJ-45 conversions (SFP dependent)
- Any combination of 3406/3405 SFP types may be installed in any slot, inc. optical transmit, receive, regenerator and electrical distribution amplifiers
- All active components are hot-swappable
- Accommodates single or dual redundant frame controllers
- Accommodates redundant AC inlet power supplies
- Positive locking high density HD-BNC connectors
- Optional integrated CWDM module does not require additional rack space and may be used to condense up to 36x signals onto two fiber strands

# 3406FR-HDBNC

## Fiber Optic SFP HD-BNC Frame



Note: optional redundant frame controller (3406FC) cannot be used simultaneously with the 3406CWD series unit

### Ordering Information

#### 3406FR-HDBNC

Fiber optic SFP frame with HD-BNC type connectors plus 4 SFP slots for additional conversion

Note: SFPs, frame controllers and redundant power supplies are sold separately. Please specify at the time of ordering.

#### Ordering Options:

##### 3406FC

3406 Frame Controller

##### 3406PS

Redundant/Spare/Replacement Internal Power Supply unit for the 3406FR-HDBNC frame

##### 3406FAN

Replacement/Spare 3406FAN module for 3406FR-HDBNC frame

#### Fiber Optic Mux/Demux Module Options:

##### 3406CWD-M9

Single 9 Channel CWDM Mux, 1450nm to 1610nm, includes MTP to LC/UPC breakout cable, Used in 3406FR-HDBNC Frame

##### 3406CWD-D9

Dual 9 Channel CWDM Mux, 1450nm to 1610nm, includes MTP to LC/UPC breakout cable, Used in 3406FR-HDBNC Frame

##### 3406CWD-2-M9

Dual 9 Channel CWDM Mux, 1450nm to 1610nm, includes MTP to LC/UPC breakout cable, Used in 3406FR-HDBNC Frame

##### 3406CWD-2-D9

Dual 9 Channel CWDM Demux, 1450nm to 1610nm, includes MTP to LC/UPC breakout cable, Used in 3406FR-HDBNC Frame

# 3406FR-HDBNC

Fiber Optic SFP HD-BNC Frame



## Specifications

### System:

Density: 16x video conversion SFPs, up to 32x EO, OE, or a mixture of EO and OE in a 1RU;  
4x MSA-compliant SFP slots for additional SFP to SFP conversions

Connector: HD-BNC  
Impedance: 75Ω

### Communication & Control:

Serial: RS-232 — single micro USB B connector  
Ethernet: SNMP over IEEE 802.3/U (10/100/1000 BaseTx)  
RJ-45 connector  
Control: VistaLINK® PRO, WebEasy

### Electrical Inputs/Outputs:

Connector: HD-BNC  
Impedance: 75Ω (nominal)

### Physical:

Dimensions: 19" W x 1.8" H x 8" D (483 x 46 x 203 mm)  
Module Capacity: 16x Evertz SFP modules, 4x MSA-compliant SFP modules  
Operating Temp.: 0–50°C (with 3406FAN installed)

### Electrical:

Power Supply Configuration: Dual/Redundant: Optional  
Inlets: Separate inlets per power supply  
Voltage: Auto-ranging 100–240V AC, 50/60Hz  
Max. Power Consumption: 60W  
Status Indicators: Power supply status LEDs (each per power supply)

### Safety & Compliance:

Safety: TUV listed, complies with CAN/CSA-C22.2 No. 62368-1:2019, UL 62368-1:2019, IEC 62368-1:2018, IEC 60950-1:2005, AMD1:2009, AMD2:2013  
EMC/EMI: CISPR 32:2012/ EN55032:2012, CISPR 35:2016/ EN55035:2017, FCC Part 15 Subpart B, ICES-003:2019

## Ordering Information (continued)

<b>3406CWDM-M18</b>	Single 18 Channel CWDM Mux, 1270nm to 1610nm, includes MTP to LC/UPC breakout cable, Used in 3406FR-HDBNC Frame
<b>3406CWDM-D18</b>	Single 18 Channel CWDM Demux, 1270nm to 1610nm, includes MTP to LC/UPC breakout cable, Used in 3406FR-HDBNC Frame
<b>3406CWDM-2-M18</b>	Dual 18 Channel CWDM Mux, 1270nm to 1610nm, includes MTP to LC/UPC breakout cable
<b>3406CWDM-2-D18</b>	Dual 18 Channel CWDM Demux, 1270nm to 1610nm, includes MTP to LC/UPC breakout cable
<b>SFP Interface Options:</b>	
<i>Multimode applications require a 5dB optical attenuator at the output of all transmitting ports, except when "-S" short haul version transmitter SFPs are used. XX versions include the following: 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61;</i>	
<i>XX/YY versions include the following: 27/29, 31/33, 35/37, 39/41, 43/45, 47/49, 51/53, 55/57, 59/61</i>	
<i>(see wavelength ordering information)</i>	
<b>3406T13-2-12G</b>	Dual Channel 12G-SDI SFP Optical Transmitter with standard 1310nm lasers
<b>3406Txx/yy-2-12G</b>	Dual Channel 12G-SDI Optical Transmitter SFP with CWDM lasers for 3406FR-HDBNC
<b>3406R-2-12G</b>	Dual channel 12G-SDI SFP Optical Receiver
<b>3406R-DA4R-12G</b>	Single channel 12G-SDI SFP Optical Receiver with 4 Reclocked Outputs for 3406FR-HDBNC
<b>3405T13-2</b>	3G/HD/SD Dual Channel 1310nm, SFP Transmitter, Non-Reclocking
<b>3405T13-2-S</b>	3G/HD/SD Dual 1310nm SFP Transmitter, Non-reclocking, Short-haul or Multimode use
<b>3405Txx/yy-2</b>	3G/HD/SD Dual Channel CWDM SFP Transmitters, Non-Reclocking (Wavelength 27 to 61)
<b>3405T13-R</b>	3G/HD/SD SFP Transmitter, Reclocked BNC Loop Output & Single Reclocked Optical Output, for use with 3405FR Frame
<b>3405T13-R-S</b>	3G/HD/SD SFP transmitter. 1310nm FP short-haul laser. Single reclocked optical output, single reclocked electrical loop output when used in BNC frames, triple electrical loop output in DIN frames
<b>3405Txx-R</b>	3G/HD/SD SFP CWDM Transmitter, 3 Reclocked DIN Loop Output + Single Reclocked Optical Output
<b>3405R-2R</b>	Dual Reclocked Version of 3405R-2
<b>3405R-2</b>	3G/HD/SD dual channel SFP receiver, non-reclocking
<b>3405R-DA4R</b>	3G/HD/SD SFP Single Reclocked Receiver, Dual Electrical Output when used in 3405FR-BNC, Quad Electrical Output on 3405FR-DIN
<b>3405R-DA4R-H</b>	3G/HD/SD SFP single reclocked high sensitivity receiver, dual electrical output when used in BNC frames, quad electrical output in DIN frames
<b>3405O013-DA4</b>	3G/HD/SD SFP Receiver. Reclocked Optical Loop Output with Dual Reclocked Electrical Outputs When Used in BNC Frames, Quad Reclocked Electrical Outputs When Used in DIN Frames
<b>3405O013-DA4-H</b>	3G/HD/SD SFP high sensitivity receiver, reclocked optical loop output + reclocked electrical outputs
<b>3405O0xx-DA4</b>	3G/HD/SD SFP receiver, reclocked DWDM optical loop output, dual reclocked electrical outputs for use with standard BNC and DIN 3405FR frame
<b>3405O0xx-DA4-H</b>	3G/HD/SD SFP receiver/regenerator. CWDM DFB laser, high-sensitivity receiver. Single reclocked optical output, dual reclocked electrical output when used in BNC frames, quad electrical output in DIN frames