MultiDyne®
Video & Fiber Optic Systems

VF-9000 Series
Versatile Data & Video Fiber Optic Transport Platform
1GbE RJ-45 & BNC or HD-BNC Coaxial I/O up to 12G-SDI

FEATURES

▷ High Density – Up To 9 1GbE RJ-45, 18 BNCs or Up To 36 HD-BNCs

▷ All I/O Are Configured Automatically Based On VFC/ SFP Selection

▷ SFP Modules Can Be Hot-swapped Without De-cabling Coaxial Connections

▷ Redundant AC Power Supplies

▷ Optional Single or Dual Integrated CWDM Muxes/De-Muxes

▷ Condense Signals Up To 36 Signals on Two SM Fibers

▷ Can Be Used For Video Transport, Signal Regeneration or Wavelength Shifting.

APPLICATIONS

▷ Sports Broadcast

▷ ENG, EFP

▷ Military

▷ Live Stage Events

▷ Intra & Inter-Facility Connection

▷ Campus & Metro Transport

The VF-9000 is a 1RU, high density video fiber optic transport platform with 18 optical I/O (9 or 18 SFP Ports), it can be configured with up to 18 full size BNCs or 36 HD-BNCs. The system also supports up to 9 1GbE optical extensions, and provides the user with the option to handle SDI and LAN signals in one frame.

The configuration of video input vs. output is configured automatically, following the I/O of the SFP installed. If a dual TX SFP is inserted into a slot, the two BNCs at the back of the slot become inputs. If a dual RX SFP is inserted into a slot, the two BNCs at the back of the slot become outputs. There are no setups or configurations required.
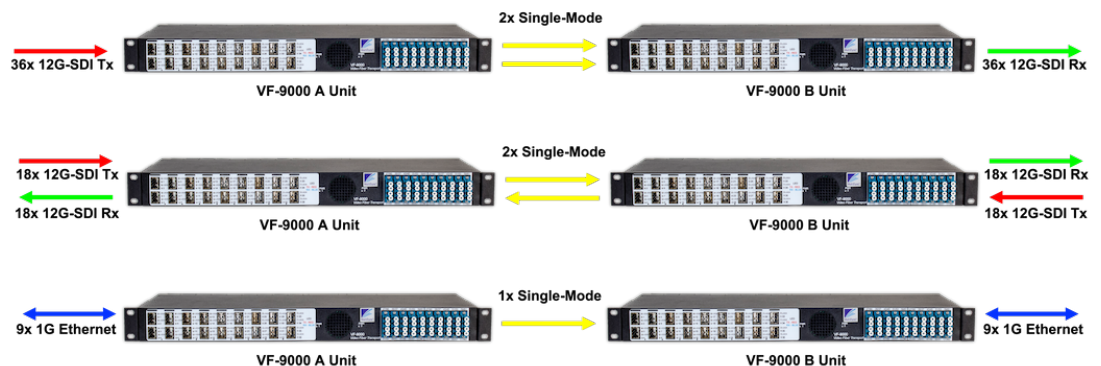
If the unit is populated with CWDM SFPs, all 18 signals can be multiplexed/de-multiplexed over from one SM fiber. Next to the SFP cages

are the optical multiplexer/de-multiplexer I/O's, configured with LC ports for easy patching with generic, inexpensive LC patch cables.

Each video card in the VF-9000 has 2 BNCs or 4 HD-BNCs on the back, and one or two SFP cages in the front. These cards can be ordered with two channel SFPs and two BNCs as described above, or with a single BNC input and loop output. In this case, there will be only one optical output. The reciprocal receiver card would have only one optical input with a dual BNC output.

Ideal for use in OB vans where space is limited and high density is a necessity. With dual hot swappable power supplies, there is peace of mind with power redundancy and no need for cumbersome external power supplies.

APPLICATIONS

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TECHNICAL SPECIFICATIONS

Digital Video

Video Connectors	BNC or HD-BNC
Number of Copper Inputs or Outputs	up to 18 BNCs or up to 36 HD-BNCs
Interface	SMPTE 2082, SMPTE 2081, SMPTE 424, SMPTE 297M, SMPTE 292M, SMPTE 259M-C, DVB-ASI
Input Coax EQ	11.88Gbps: 55m, 5.94Gbps: 70m, 3 Gbps: 120m, 1.485 Gbps: 240m, 143-260 Mpbs: 450m
Input Level	800mV (peak to peak)
Impedance	75 Ohms
Rate	10-12
Return Loss	>15 dB at 5 MHz - 1.485 GHz >10 dB up to 3 GHz

Mechanical, Environmental

Module Capacity	9 SFP modules (VF-9000-1M-RP-S) or 18 SFP modules (VF-9000-2M-RP-S)
Temperature Range	-25 to 50°C FAN

Ethernet

SFP	SFP Transceiver module, 1.25 Gbps, CWDM 1270-1610, distance 20/40/80km

Video

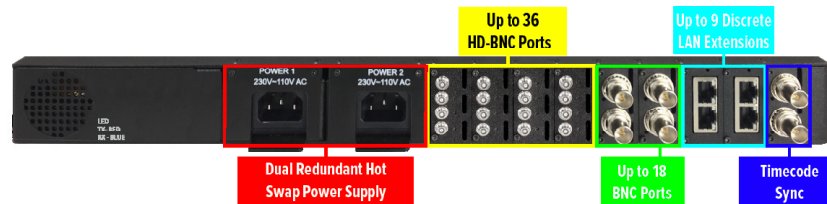|	
SFP	SFP 3G Video, Single TX (Loop back option), Single RX (Loop back option) Dual TX, Dual RX and Transceiver distance 20km (40/80km optional) (12G optics are 10km)

Standard Frame

Overall Dimensions (LxWxH)	19"L x 7.5"W x 1.75"H

Power

Power Supply Configuration	Dual Internal hot swappable power supplies
Voltage	AC input 100-240V~47-63Hz 1.1A max
Maximum Power Consumption	25 watts (fully loaded frame with all accessories) Note: Power consumption dependent on SFP type
Connectors	C13 line cord
Status Indicators	Power LEDs and Data Rate indicators

ORDERING INFORMATION

Card based unit is customizable to your signal needs. See ordering details below.

Up to 36 HD-BNC Ports

Up to 9 Discrete LAN Extensions

Backside of panel shown

Dual Redundant Hot Swap Power Supply

Up to 18 BNC Ports

Timecode Sync

FRAME OPTIONS	
VF-9000-FP-RP-S	Versatile Fiber Optic Transport Frame, 1 RU, Supports up to 9 VFC cards (up to 36 Video Channels) w/ SNMP and dual power supply redundancy; Requires VFC cards & SFPs which are sold separately. This model does not include a multiplexor, so each video channel requires 1 fiber for operation"
VF-9000-1M-RP-S	Versatile Fiber Optic Transport Frame, 1 RU, Supports up to 9 VFC cards (up to 36 Video Channels) w/ SNMP and dual power supply redundancy; Includes ONE internal 18 Channel multiplexer; Requires VFC cards & SFPs which are sold separately (formerly part number "VF-9000-18-BNC-RP")
VF-9000-2M-RP-S	Versatile Fiber Optic Transport Frame, 1 RU, Supports up to 9 VFC cards (up to 36 Video Channels) w/ SNMP and dual power supply redundancy; Includes TWO internal 18 Channel multiplexers; Requires VFC cards & SFPs which are sold separately (formerly part number "VF-9000-36-MBNC-RP")
CARD OPTIONS	
VFC-12G-C	12G Video Card for VF-9000 Frame; Up to (2) 12G Videos with BNC connectors; Requires 1 SFP for operation
VFC2-12G-C	12G Video Card for VF-9000 Frame; Up to (4) 12G Videos with HD-BNC connectors; Requires 2 SFPs for operation
VFC-GE-C	Gigabit Ethernet Card for VF-9000 Frame; Requires 1 SFP for operation
VF-BLANK	Front & rear blank panel for 1 empty card slot in VF-9000 frames
Please contact MultiDyne for all SFP options or at http://www.multidyne.com/product/sfp-small-form-factor-pluggables.html	

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