MultiDyne®
Video & Fiber Optic Systems

VF-9000 Series

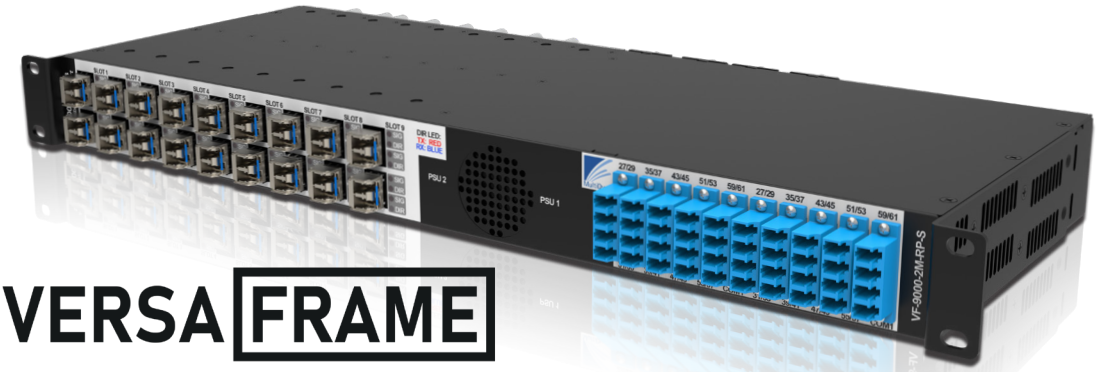
Versatile High Density Fiber Optic Transport Platform
1GbE RJ-45 & BNC or HD-BNC Coaxial I/O up to 12G-SDI

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
- Fiber-Per-Signal (No-Muxes) Version Available
- Condense Up To 36 Signals on Two SM Fibers

APPLICATIONS

- Sports Broadcast
- ENG, EFP
- Military
- Live Stage Events
- Intra & Inter-Facility Connection
- Campus & Metro Transport



VERSA FRAME

The VF-9000 is a versatile 1RU, very high-density fiber optic transport platform with SNMP monitoring, openGear dashboard connect and RESTful API.

The VF-9000 frame has 18 optical I/O (9 or 18 SFP Ports) corresponding to 9 selectable rear module slots and can be configured with up to 18 full-size BNCs or 36 HD-BNCs for SDI signals up to 12G-SDI. The system also supports Analog, AES/EBU and MADI audio, Serial Data & Tally, HDMI 2.0, 1G or 10G Ethernet, CVBS/Black burst, and Genlock/SYNC all in the same frame.

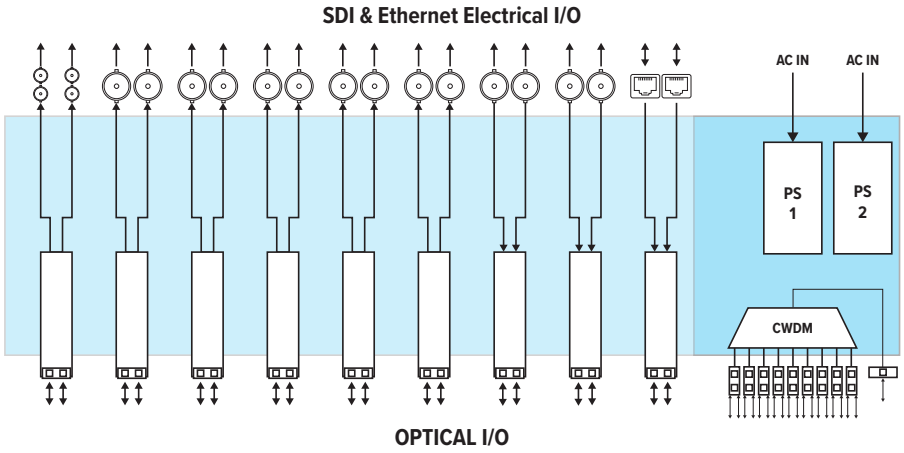
The configuration of the video input vs. output is configured automatically, following the I/O of the SFP installed. If a dual TX SFP is inserted in a slot, the two BNCs at the back of the slot become inputs. If a dual RX SFP is inserted in a slot, the two BNCs at the back of the slot become outputs. There are no setups or configurations required.

Each video card in the VF-9000 has 2 BNCs or 4 HD-BNCs on the back, and one or two SFP cages on 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.

If the unit is populated with CWDM SFPs, up to 36 signals can be multiplexed/de-multiplexed over/from two SM fibers. 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.

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.

BLOCK DIAGRAM



252 Indian Head Rd
Kings Park, NY 11754
1-877-685-8439 / +1-516-671-7278
sales@multidyne.com
www.multidyne.com

www.MultiDyne.com

© 2026 MultiDyne

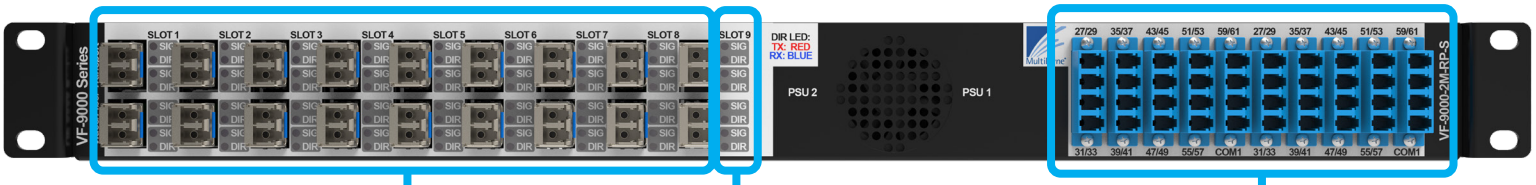
Specifications subject to change without notice

Made in USA

MultiDyne®
Video & Fiber Optic Systems

VF-9000 Series

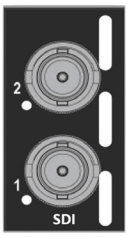
Versatile High Density Fiber Optic Transport Platform
1GbE RJ-45 & BNC or HD-BNC Coaxial I/O up to 12G-SDI



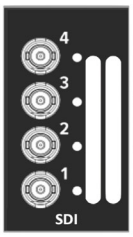
18X SFP Cages | Status LEDs | Dual 18CH CWDM Muxes

WebUI/SNMP | Redundant PS | 9x Card Slots

VF-9000 REAR CARD MODULES - I/O

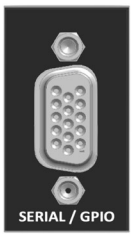


12G & 3G SDI I/O
Dual TX
Dual Rx
Single TX
Single RX
TRX

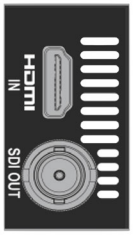


12G & 3G SDI I/O
Dual TX
Dual Rx
Single TX
Dual TX
TRX

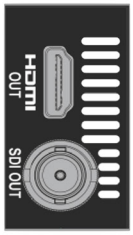
AUDIO I/O *
4x4 Analog
2x2 AES Pairs



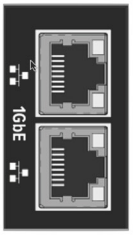
SERIAL DATA *
Dual RS-232/422
2x GPI
2x GPO



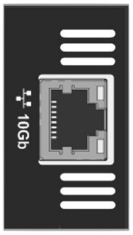
HDMI EO
HDMI 2.0 TX
SDI Copy Out



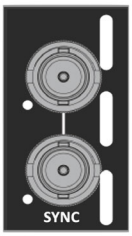
HDMI OE
HDMI 2.0 RX
SDI Copy Out



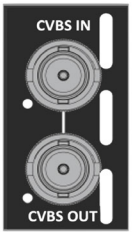
1GbE Ethernet
Full 1GbE
2 Port
Unmanaged
Switch



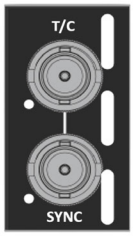
10GbE
Full 10GbE



SYNC TX or RX
Bi-Level Sync
Tri-Level Sync



CVBS TRX *
Blackburst
NTSC
PAL



TC & SYNC *
TC Input or Output
SYNC Input or Output

*** Contact Your MultiDyne Sales Rep For Availability**

MultiDyne
252 Indian Head Rd
Kings Park, NY 11754
1-877-685-8439 / +1-516-671-7278
sales@multidyne.com
www.multidyne.com

© 2026 MultiDyne

Specifications subject to change without notice

Made in USA

www.MultiDyne.com

MultiDyne®
Video & Fiber Optic Systems

VF-9000 Series

Versatile High Density Fiber Optic Transport Platform
1GbE RJ-45 & BNC or HD-BNC Coaxial I/O up to 12G-SDI

TECHNICAL SPECIFICATIONS- FRAME AND REAR MODULES

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	100mV (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-9000-18-BNC-RP) or 18 SFP modules (VF-9000-36-MBNC-RP)
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 20/40/80km (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

10GbE Ethernet Module

Supported ethernet standards	10GBASE-T 5GBASE-T 2.5GBASE-T 1000BASE-T 100BASE-TX 10BASE-Te
Cable reach 10G	100m over CAT6A and CAT7 cable 55m over CAT 6 Best effort over CAT5e
Cable reach 5G, 2.5G	100m over CAT5e or better cable
Cable reach 10M, 100M, 1G	130m over CAT5e or better cable
Power consumption	3,85Watt @ 10G 2,75Watt @ 10M, 100M, 1G
Power	5-15VDC Locking 2,5/5,5mm barrel USB-C
Operating temperature	-20 to +45 °C (-4 to +113°F)
Storage temperature	-40 to +70°C (-40 to +158°F)

VFC-SERIAL-GPIO-C Module

Supported SFPs	1,25Gbps
Supported data standards	RS232, RS422 & RS485
Maximum data rate	1Mbps @ RS232 10Mbps @ RS422 & RS485
RS232 input voltage	+/- 25V
RS232 Output voltage	+/- 5V @ 3kΩ to GND
RS422 & RS485 Input voltage	-7V to +12V, 0.2V differential minimum
RS422 Output voltage	2V minimum
RS485 Output voltage	1.5V minimum
GPI & Tally In mode	Optical isolated input, active GND
GPO & Tally out mode	Normally open, Form 1 SPST
Power consumption	1Watt max.
Power	12V from frame
Operating temperautre	-20 to +45 °C (-4 to +113°F)
Storage temperature	-40 to +70°C (-40 to +158°F)

MultiDyne®
252 Indian Head Rd
Kings Park, NY 11754
1-877-685-8439 / +1-516-671-7278
sales@multidyne.com
www.multidyne.com

© 2026 MultiDyne

Specifications subject to change without notice

Made in USA

TECHNICAL SPECIFICATIONS- CONTD.

VFC-AUDIO-C

Audio	
Number of Input Channels (mono)	4
Number of Output Channels (mono)	4
Type	Balanced. Analog Line-Level or AES3, selectable in groups of 2
Analog Audio:	
Level	+4dBu nominal, +24dBu max.
Input Impedance	> 10k Ohms
Output Impedance	50 ohms, balanced
S/N	>90db
Frequency Response	+/-0.1db 20Hz – 20kHz
Distortion	< 0.05%
Digital Audio:	
Sample Rate	Up to 48kHz
Bit Depth	Up to 24 bits

VFC-CVBS-C

Video, CVBS	
Number of Inputs	1
Number of Outputs	1
Supported Signal Types	Analog NTSC, PAL
Impedance	75 Ohms
Nominal Signal Level	1Vp-p

VFC-HDMI-OE

Connector	75-ohm BNC (loop out), HDMI Type A (input)
Bit Rate (SDI)	HD/3G/6G/12G
HDMI standard	HDMI 2.0 (video formats with HD/3G/6G/12G SDI equivalents)
Level	800mVp-p nominal
SFP	HD/3G/6G/12G Video SFP 1RX

VFC-HDMI-EO

Connector	75-ohm BNC (loop out), HDMI Type A (input)
Bit Rate (SDI)	HD/3G/6G/12G
HDMI standard	HDMI 2.0 (video formats with HD/3G/6G/12G SDI equivalents)
Level	800mVp-p nominal
SFP	HD/3G/6G/12G Video SFP 1TX

MultiDyne®
252 Indian Head Rd
Kings Park, NY 11754
1-877-685-8439 / +1-516-671-7278
sales@multidyne.com
www.multidyne.com

© 2026 MultiDyne

MultiDyne®
Video & Fiber Optic Systems

VF-9000 Series

Versatile High Density Fiber Optic Transport Platform
1GbE RJ-45 & BNC or HD-BNC Coaxial I/O up to 12G-SDI

ORDERING INFORMATION

VERSA FRAME

Contact sales@multidyne.com with your signal requirements or use the VF-Series Configuration Tool at https://configurator.multidyne.com/products/vf

VF-9000 Card Based Unit Is Customizable To Your Signal Needs. See Ordering Details Below.

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 multiplexer, 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
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
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
VFC-GL-C	Genlock/Sync Card for VF-9000 Frame; Requires 1 SFP for operation
VFC-CVBS-C	Composite Video / Black burst Card for VF-9000 Frame; Requires 1 SFP for operation
VFC-AUD-ANA-AES-C	Audio Card for VF-9000 Frame. Supports 4x4 Analog or 2x2 AES Audio; Requires 1 SFP for operation
VFC-HDMI-OE-C	HDMI Output Card for VF-9000 Frame; Requires 1 SFP for operation
VFC-HDMI-EO-C	HDMI Input Card for VF-9000 Frame; Requires 1 SFP for operation.
VFC-10GE-C	10G Ethernet Card for VF-9000 Frame; Requires 1 SFP for operation
VFC-SERIAL-GPIO-C	Serial Data and GPIO Card for the VF-9000 Frame. Supports 2x RS-232/422/485 and 2x GPIO; Requires 1 SFP for operation
VFC-MADI-C	MADI Audio Card for VF-9000 Frame; Up to (2) MADI with BNC connectors; Requires 1 SFP for operation
VFC-TC-SYNC-C	Timecode & Genlock/Sync Card for VF-9000 Frame; Requires 1 SFP for operation

ACCESSORIES	
VF-BLANK	Front & rear blank panel for one empty card slot in VF-9000 frames
VF-9000-PS	Spare Power supply for VF-9000 frame
VBAUDIO-MDR	Audio Diving Board Breakout Adaptor for VB Series, MDR Audio Connector
VBDATA-HD15	Serial Data Diving Board Adaptor for VB Series, HD-15 Connector
VF-EXTRACKEAR-KIT	Extended Rack Ear Kit for VF-9000 frame
MDR-XLR-4X4AN-1M	1 Meter XLR Breakout for 4 x 4 Analog Audio. MDR Connector to 4 XLR male & 4 XLR female
MDR-XLR-2X2AES-1M	1 Meter XLR Breakout for 2 x 2 AES Digital Audio for MDR connector; 2 XLR male & 2 XLR female

MultiDyne®
252 Indian Head Rd
Kings Park, NY 11754
1-877-685-8439 / +1-516-671-7278
sales@multidyne.com
www.multidyne.com

© 2026 MultiDyne

Specifications subject to change without notice

Made in USA