

### FEATURES

- ▶ Build To Your Specification
- ▶ Video, Audio, Data & Ethernet Fiber Transport
- ▶ Choose the Signals You Need, Unit Built to Order
- ▶ Rugged 10, 6, 4 and 2 Card Boxes
- ▶ Chassis Available in Standard Black or New White finishes for Corporate, Medical, Scientific or Educational Environments

### APPLICATIONS

- ▶ PTZ/POV Camera Control
- ▶ OB and Studio Links
- ▶ Intercom Extensions
- ▶ Long Distance Video, Audio, Data Transport

### Provides Solutions For Any Combination of Signal Transport Over Fiber



# VERSA|BRIX

The VersaBrix Series from MultiDyne provides a versatile solution for your enterprise A/V and broadcast fiber transport requirements. Utilizing up to 18 CWDM wavelengths you can transmit and receive all signals over one single mode fiber. Alternatively, each card's I/O can be sent or received over its own disparate fiber.

Mix and match signal formats ranging from RS232/422 data, analog audio, and digital video up to 12G-SDI and even 10 Gb Ethernet in the same unit. With the VX (10 card slot), V6 (6 card slot), V4 (4 card slot), VT (2 card slot) enclosures, a unit can be created to your exact specifications. The possibilities are endless by using the [intuitive web-based configurator tool](#).

Signal presence is displayed on the front panel with LED indicators. A link LED indicates the VB has established an optical link to another VB box while the front panel power meter indicates receiver sensitivity from -21 to 0 dBm.

The standard VB box comes complete with 12 VDC power supply and an option for redundancy is available. Other power options include a battery plate and remote power can be achieved over SMPTE hybrid fiber optic cable using our external JUICE or APE power supplies.

While portable in nature for field applications, mounting options for the VB Series include 1 RU Rackmount Kits, PTZ Kits to be mounted directly to your camera and wall mounting brackets.

Many VB configurations are compatible with an openGear card with similar I/O. This allows for VB's in the field transporting signals back to a centralized industry standard 2 RU frame with redundant power and DashBoard monitoring.

V6 6 Card Slot Chassis  
Example Shown in White

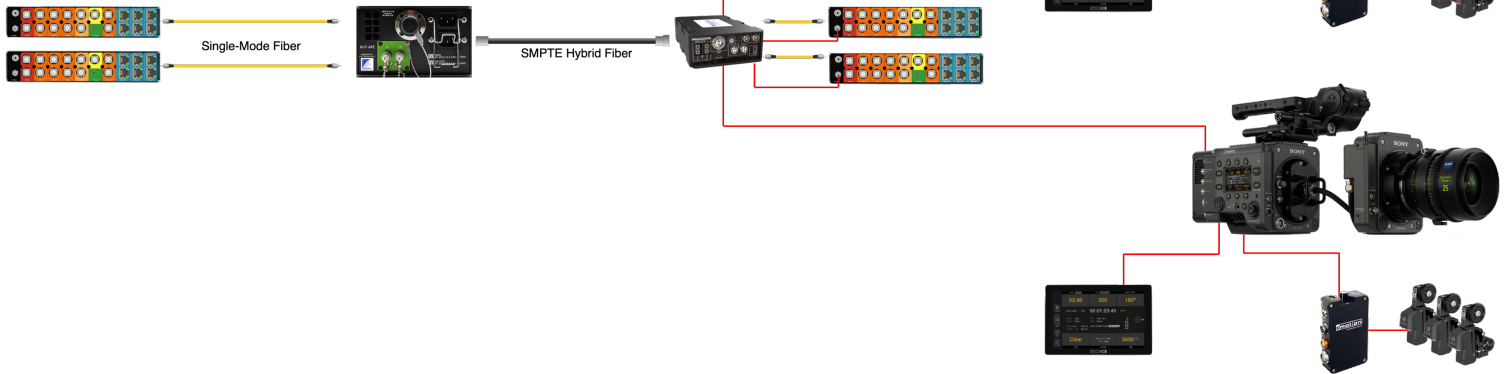


Now Available in White to Maintain Your Installation's Integrity

## APPLICATIONS

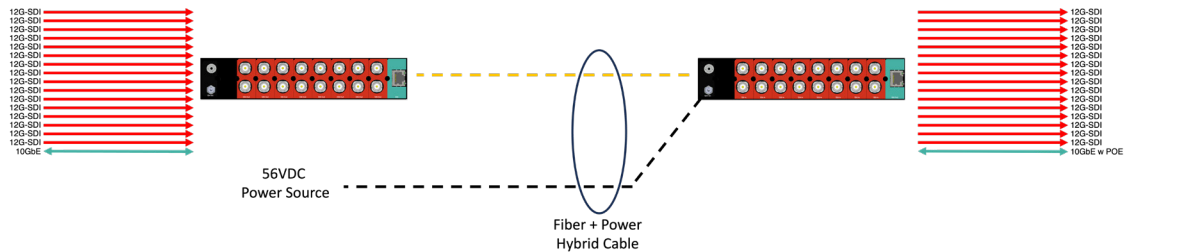
### Remote Power Extension w/ Optical IO

#### VB + HUT-APE + QS4-APE

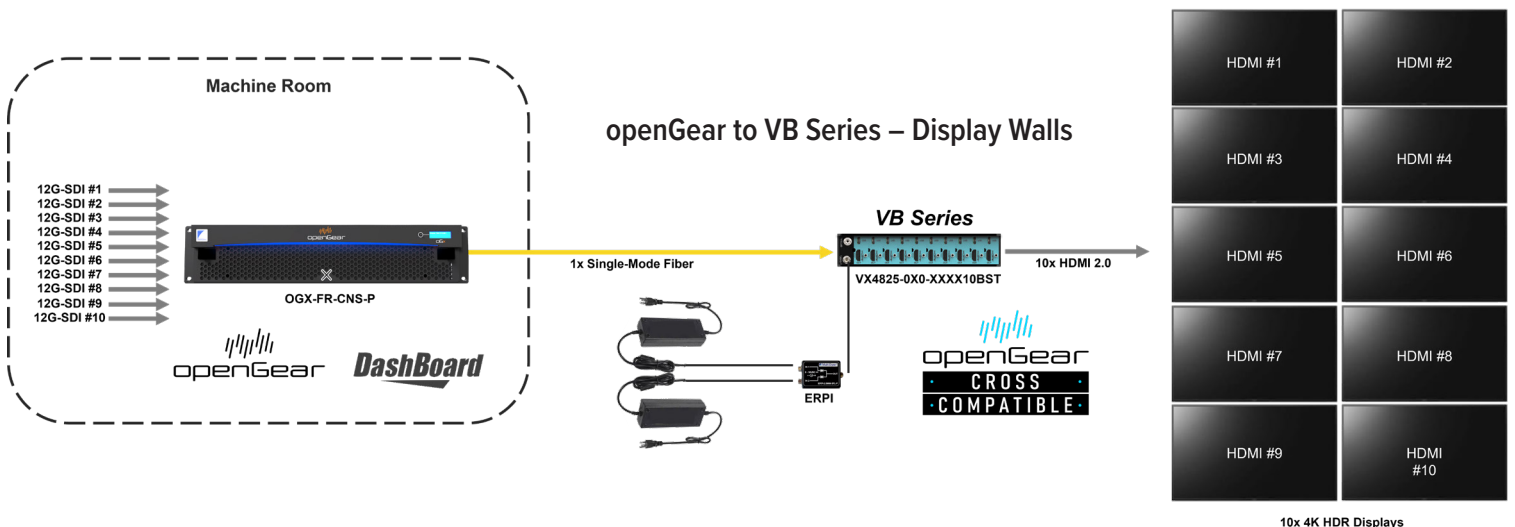


### VB Low-Voltage

#### Structured / Hybrid / Composite Fiber w/ Power Cables



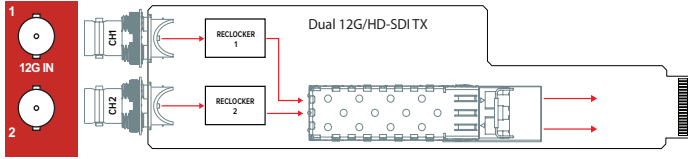
### openGear to VB Series – Display Walls



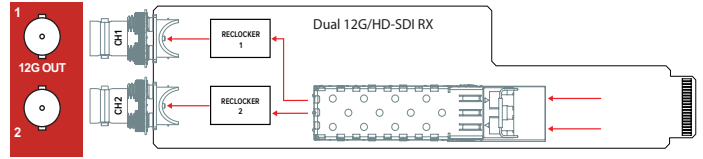
10x 4K HDR Displays

## REAR MODULE DIAGRAMS

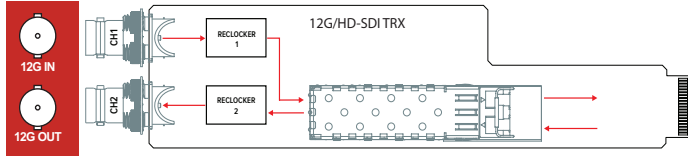
**DUAL 12G-SDI VIDEO TRANSMITTER**  
2 SDI Inputs



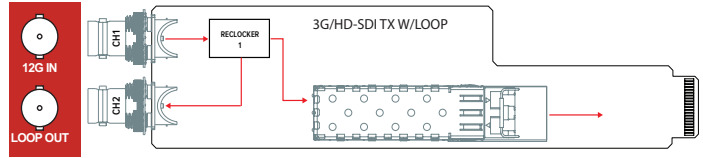
**DUAL 12G-SDI VIDEO RECEIVER**  
2 SDI Outputs



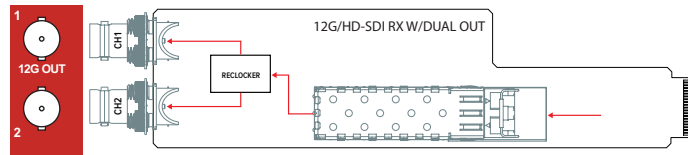
**12G-SDI VIDEO TRANSCEIVER**  
1 SDI Input, 1 SDI Output



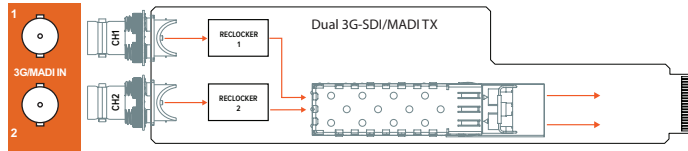
**12G-SDI VIDEO TRANSMITTER**  
1 SDI Input with 1 BNC Loop Out



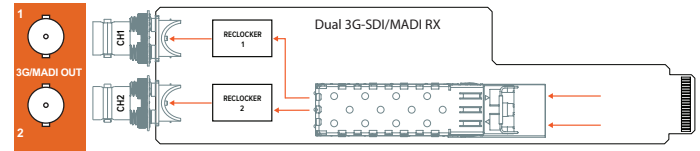
**12G-SDI VIDEO RECEIVER**  
2 SDI Outputs, same Signal



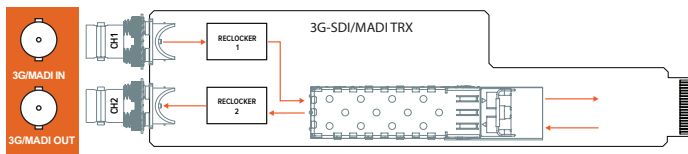
**DUAL 3G-SDI/MADI TRANSMITTER**  
2 SDI Inputs



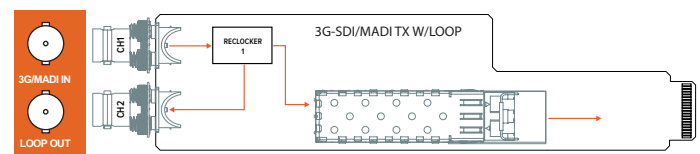
**DUAL 3G-SDI/MADI RECEIVER**  
2 SDI Outputs



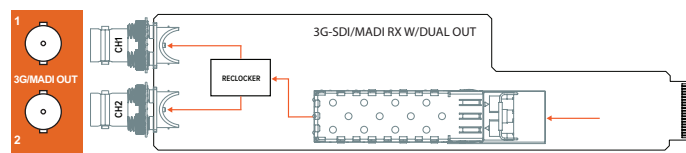
**3G-SDI/MADI TRANSCEIVER**  
1 SDI Input, 1 SDI Output



**3G-SDI/MADI TRANSMITTER**  
1 SDI Input, 1 BNC Loop Out



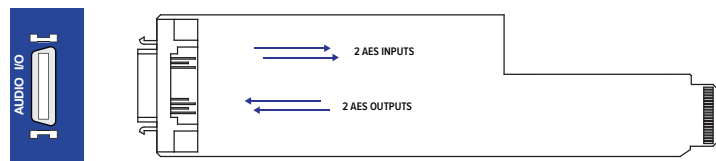
**3G-SDI/MADI RECEIVER**  
2 SDI Outputs, same Signal



## FEATURES (CONT.)

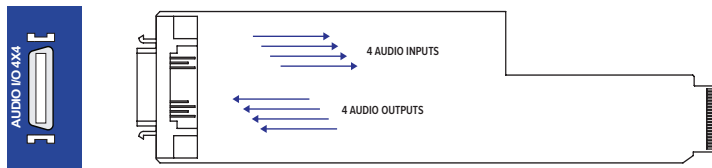
### AES AUDIO TRANSCIEVER

2 AES Audio Inputs, 2 AES Audio Outputs



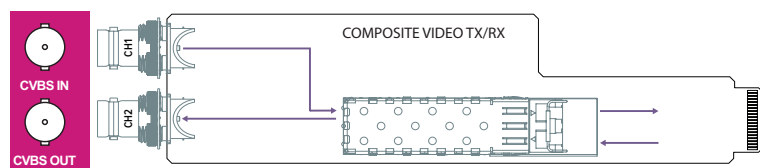
### ANALOG AUDIO TRANSCIEVER

4 Analog Audio Inputs, 4 Analog Audio Outputs



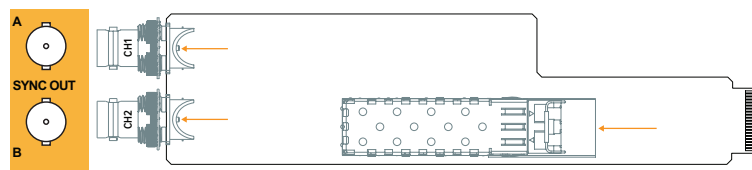
### COMPOSITE VIDEO TRANSCIEVER

1 Analog Video Input, 1 Analog Video Output



### GENLOCK/SYNC

Tri-Level Sync/Genlock



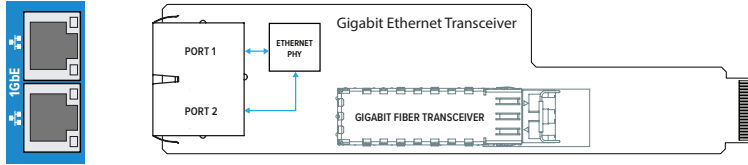
Explore the multitude of **VERSA|BRICK** configurations using the config tool:

<https://configurator.multidyne.com/launcher>

**FEATURES (CONT.)**

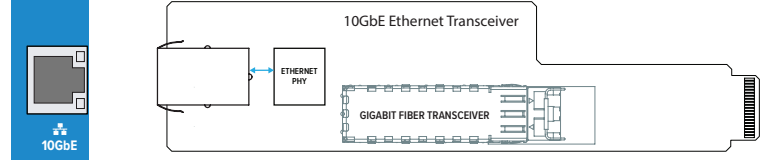
**1 GbE ETHERNET TRANSCEIVER**

*2 Port Ethernet hub/switch*



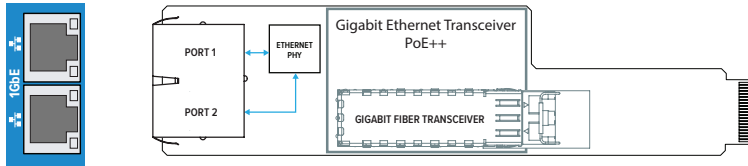
**10 GbE ETHERNET TRANSCEIVER**

*1 Port Ethernet hub/switch*



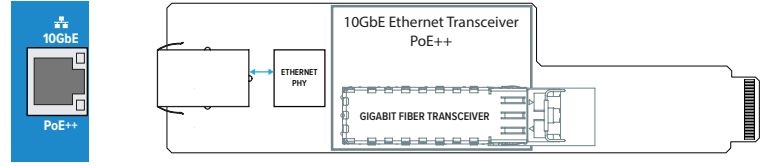
**1 GbE PoE++ ETHERNET TRANSCEIVER**

*2 Port Ethernet hub/switch*



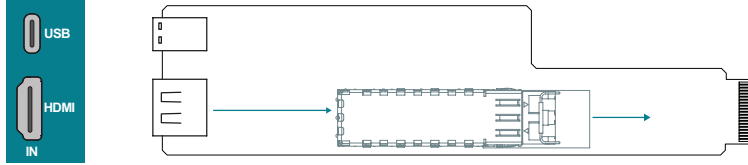
**10 GbE PoE++ ETHERNET TRANSCEIVER**

*1 Port Ethernet hub/switch*



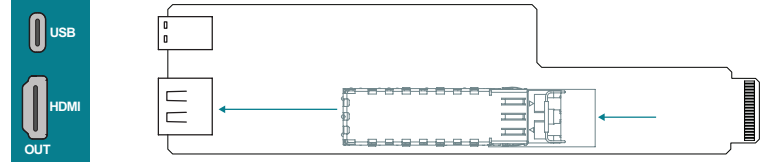
**HDMI TRANSMITTER**

*HDMI-USB Port*



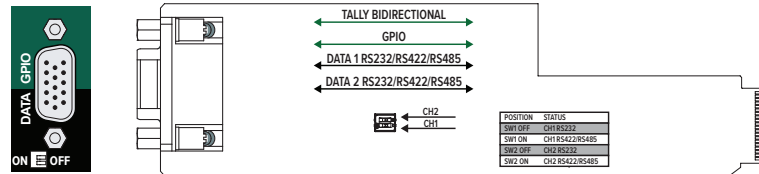
**HDMI RECEIVER**

*HDMI-USB Port*



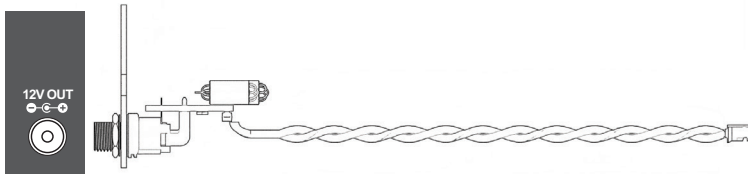
**SERIAL DATA/TALLY/GPIO TRANSCEIVER**

*2 Bidirectional RS-232/RS-422/RS-485, 1 Bidirectional Tally, 1 Bidirectional GPIO*



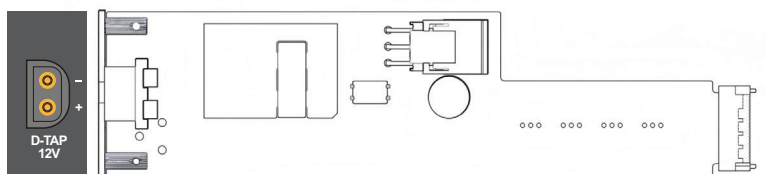
**EXTERNAL POWER TAP (12V, 15W)**

*2.5mm Barrel*



**EXTERNAL POWER TAP (12V, 15W)**

*D-TAP*



## ACCESSORIES

**1 METER XLR BREAKOUT FOR 2 X 2 ANALOG AUDIO**  
MDR Connector to 2 XLR male & 2 XLR female  
2 AES Audio Inputs, 2 AES Audio Outputs



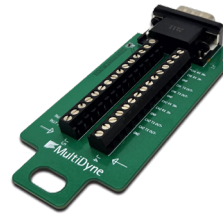
**1 METER XLR BREAKOUT FOR 4 X 4 ANALOG AUDIO**  
MDR Connector to 4 XLR male & 4 XLR female  
4 AES Audio Inputs, 4 AES Audio Outputs



**SERIAL DATA/TALLY/GPIO BREAKOUT CABLES AND DIVING BOARD ADAPTER**  
2 Bidirectional RS-232/RS-422/RS-485, 1 Bidirectional Tally, 1 Bidirectional GPIO,  
Serial Data Diving Board Adapter, HD-15 Connector



**SERIAL DATA DIVING BOARD ADAPTOR**  
HD-15 Connector



**AUDIO DIVING BOARD ADAPTOR**  
MDR Audio Connector



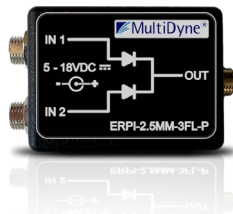
**12V MULTIDYNE POWER SUPPLY FOR VB SERIES PRODUCTS**  
6' US Power Line Cord



**POWER SUPPLY, AC-DC BRICK, EXTERNAL VB SERIES POE, 56V, 160W**  
6' US Power Line Cord



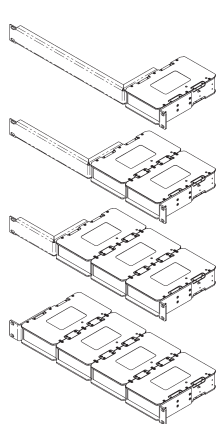
**EXTERNAL REDUNDANT POWER INTERFACE (ERPI)**  
Dual 2.5mm Female Locking Inputs, Single 2.5mm Female Locking Output, Diode  
Protected. Includes one 2' Switchcraft Male to Male Cable



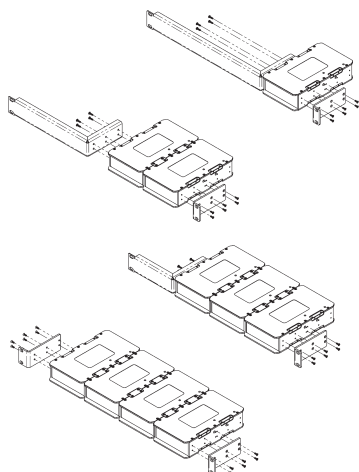


## MOUNTING ACCESSORIES

### UNIVERSAL RACK KIT FOR MOUNTING UP TO (4) VB SERIES V4 PRODUCTS IN A 1 RU RACK SPACE

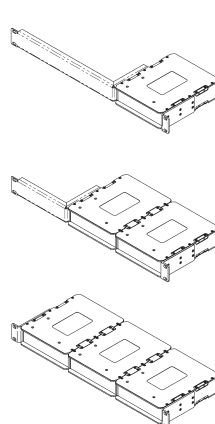


V4 Configurations

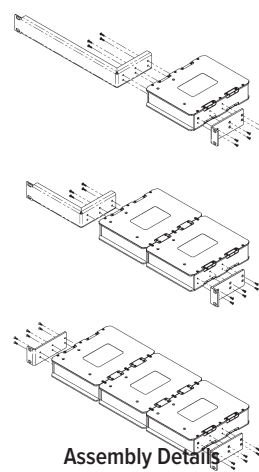


Assembly Details

### UNIVERSAL RACK KIT FOR MOUNTING UP TO (3) VB SERIES V6 PRODUCTS IN A 1 RU RACK SPACE

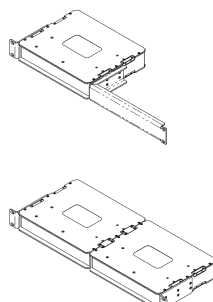


V6 Configurations



Assembly Details

### UNIVERSAL RACK KIT FOR MOUNTING UP TO (2) VB SERIES VX OR QS2 PRODUCTS IN A 1 RU RACK SPACE



VX Configurations

## MOUNTING ACCESSORIES (CONTD.)



**UNIVERSAL PTZ PLATE SYSTEM**  
*Camera Mount For V4/V6/Vx Products*

### PTZ-HD PLATE SYSTEM

*Camera Mount For V4/V6/Vx Products*



### QUICK RELEASE PTZ PLATE SYSTEM

*Camera Mount For V4/V6/Vx Products*



VX Configuration Shown



VX Configuration Shown

### UNIVERSAL WALL MOUNT KIT FOR VB SERIES PRODUCTS

*Fits V4, V6 and VX Products*



VX Configuration Shown

### BATTERY V MOUNT OR GOLD MOUNT BATTERY PLATE OPTIONS

*V4, V6 and VX Products*



V6 with V Mount Shown



V6 with Gold Mount Shown

For pricing and ordering options  
please refer to the VersaBrix (VB) Config Tool:

<https://configurator.multidyne.com/launcher>



### TECHNICAL SPECIFICATIONS

#### Digital Video Interface

*SMPTE 259M, 344M, 292M, 424M, SMPTE ST-2081, SMPTE ST-2082*

|                  |                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------|
| Input Coax EQ    | 50m at 11.88Gb/s<br>90m at 5.94Gb/s<br>180m at 2.97Gb/s<br>240m at 1.485Gb/s<br>400m at 270Mb/s |
| Input Level      | 800mV                                                                                           |
| Impedence        | 75 Ohms                                                                                         |
| Bit Error Rate   | 10-12                                                                                           |
| Jitter           | < 0.2UI                                                                                         |
| Rise/Fall Times  | < 45ps                                                                                          |
| Return Loss      | >15 dB at 5 MHz to 1.5 GHz<br>>10 dB 1.5 to 3 GHz<br>>7dB 3 to 6 GHz<br>>4dB 6 to 12GHz         |
| Gigabit Ethernet | 10/100/1000 Mbps                                                                                |
| Sync Analog      | NTSC-PAL, HDTV Tri-Level                                                                        |

#### Data

|             |                             |
|-------------|-----------------------------|
| 232,422,485 | DC-3Mbps                    |
| 232 In V    | +/- 25V max, 2V min         |
| 232 Out     | V +/- 5V @ 3Kohm, 1.6V Sens |
| 422,485 In  | V -7V to 12V, 0.2V diff min |
| GPI/GPO     | Normally Open, Form 1 SPST  |

#### Analog Audio

|                     |                              |
|---------------------|------------------------------|
| S/N                 | >90db                        |
| Frequency Response  | < +/-0.1db<br>(20Hz - 20kHz) |
| Distortion          | < 0.05%                      |
| Level Adjust        | 28,16,10,4 dBu               |
| Max I/O Level       | +24 dBu                      |
| Impedance In (bal)  | >10k Ohms +                  |
| Impedance Out (bal) | <50 Ohms                     |

#### Digital Audio

|                |                                                  |
|----------------|--------------------------------------------------|
| Input/Output   | Balanced, AES3/AES3id                            |
| I/O Impedance  | 110 Ohm/75 Ohm (DIP Sw)<br>+/-20%, 0.1MHz-6.0MHz |
| Min/Max Input  | 2-7 Vpp into 110 Ohms                            |
| Rise/Fall Time | 5-30ns for 10 Ohm                                |
| Jitter         | < 20ns                                           |

#### Electro-Optical

|                       |                     |
|-----------------------|---------------------|
| Operating Wavelengths | DFB 1271-1591nm     |
| TX Laser Output Power | -2 - 0dBm, Class 1  |
| Receiver Sensitivity  | -20 dBm             |
| Fiber Compatibility   | single mode         |
| Optical Connector     | ST, LC, SC          |
| Distance Limit        | 20km, 40km and 80km |

#### Power Rating

|                      |       |
|----------------------|-------|
| Video Card Max Power | 2.12W |
| Ethernet Card        | 1.97W |
| SYNC Card            | 2.5W  |
| Data Card            | 0.6W  |
| Audio Card           | 1.3W  |
| Power Input          |       |

#### Mechanical, Environmental

|                                  |                                                                                                  |
|----------------------------------|--------------------------------------------------------------------------------------------------|
| VT<br>Overall Dimensions (LxWxH) | 7.25"x 2.875"x 1.75"                                                                             |
| V4<br>Overall Dimensions (LxWxH) | 7.25"x 4.22"x 1.75"                                                                              |
| V6<br>Overall Dimensions (LxWxH) | 7.25"x 5.75"x 1.75"                                                                              |
| VX<br>Overall Dimensions (LxWxH) | 7.25"x 8.62"x 1.75"                                                                              |
| Video Connectors:                | BNC                                                                                              |
| SYNC and TIMECODE                | BNC                                                                                              |
| Audio Connector                  | MDR26-F                                                                                          |
| Data Connector                   | HD15-F                                                                                           |
| Ethernet                         | Dual portRJ45                                                                                    |
| Temperature Range                | -20° to +45°C                                                                                    |
| Humidity Range                   | 0 to 90% RH Non-condensing                                                                       |
| Power Input                      | 12V 2.5mm jack center pin (Non-POE VB Units)<br>56V 2.0mm jack center pin (POE enabled VB Units) |

Explore the multitude of **VERSA|BRIX** configurations using the config tool:

<https://configurator.multidyne.com/launcher>



## ORDERING INFORMATION

| Part #               | DESCRIPTION                                                                                                                                                                                   |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RM-1RU-V4            | Universal Rack Kit for mounting up to (4) VB Series V4 products in a 1 RU rack space                                                                                                          |
| RM-1RU-V6            | Universal Rack Kit for mounting up to (3) VB Series V6 products in a 1 RU rack space                                                                                                          |
| RM-1RU-VX            | Universal Rack Kit for mounting up to (2) VB Series VX products in a 1 RU rack space                                                                                                          |
| V4-PTZ-KIT           | PTZ Camera Mounting Kit 2.0 for V4 Products. Kit includes top and bottom mounts                                                                                                               |
| V6-PTZ-KIT           | PTZ Camera Mounting Kit 2.0 for V6 Products. Kit includes top and bottom mounts                                                                                                               |
| VX-PTZ-KIT-HD        | Heavy Duty PTZ Camera Mounting Kit for VX/6/4 Products. Requires Touch N Go / Flying Plate and a Quick Release Receiver Camera Mounting Systems from Wooden Camera or similar (not included). |
| PTZ-QR-V4            | Quick Release PTZ Camera Mount for V4 Products                                                                                                                                                |
| PTZ-QR-V6            | Quick Release PTZ Camera Mount for V6 Products                                                                                                                                                |
| PTZ-QR-VX            | Quick Release PTZ Camera Mount for VX Products                                                                                                                                                |
| WMK-VBSERIES         | Universal Wall Mount Kit for VB Series Products - Fits V4, V6 and VX                                                                                                                          |
| 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                                                                                                 |
| CA-HD15M2DE9-GPIO-1M | 1 Meter Breakout Y Cable: HD-15 (male) to 2 x DE9                                                                                                                                             |
| 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                                                                                                                               |
| ERPI-2.5MM-3FL-P     | External Redundant Power Interface, Dual 2.5mm Female Locking Inputs, Single 2.5mm Female Locking Output, Diode Protected. Includes one 2' Switchcraft Male to Male cable                     |
| MDS050-P120          | Spare / Redundant Power Supply For VB Series                                                                                                                                                  |
| PS-POE-56V           | Power Supply, AC-DC Brick, External VB Series POE, 56V, 160W                                                                                                                                  |

Contact [sales@multidyne.com](mailto:sales@multidyne.com) with your signal requirements or use the VB Series Configuration Tool at <https://configurator.multidyne.com/vb2/>