

FEATURES

- ▷ Build To Your Specification
- ▷ Video, Audio, Data & Ethernet Fiber Transport
- ▷ Choose the Signals You Need, Unit Built to Order
- ▷ Rugged 10, 6, and 4 Card Boxes

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

V4
4 Card Slots

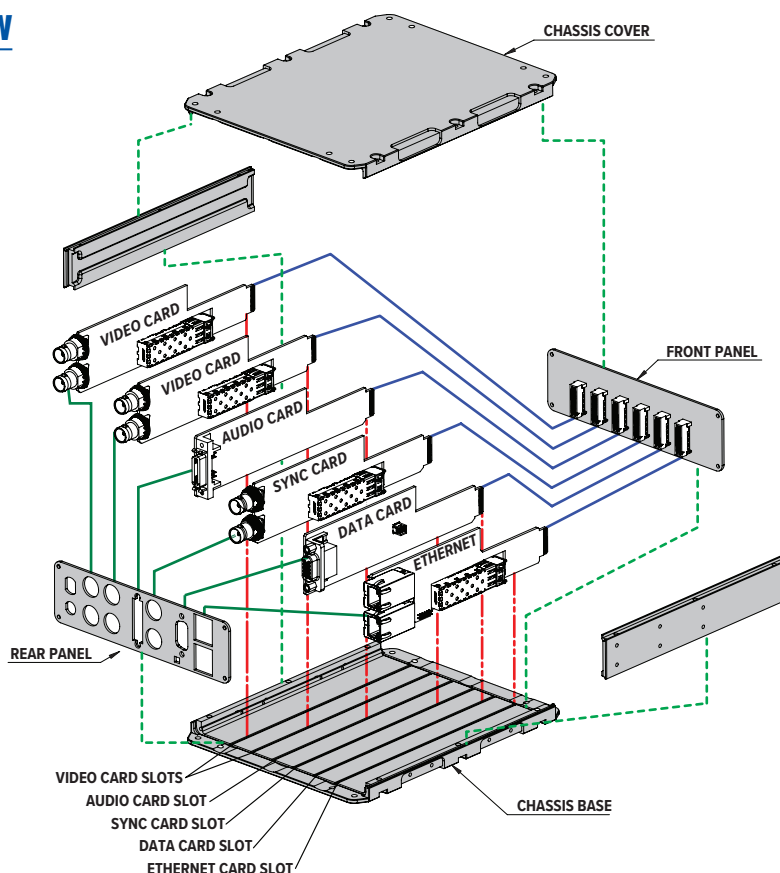
V6
6 Card Slots

VX
10 Card Slots



The VB Series Build a Box provides a solution for any combination of signal transport over fiber. With the 10, 6, and 4 card slot encasements, a unit can be created to your specification by populating the case with any complement of VB-Cards. Each card's I/O can be sent or received over its own separate fiber, or all signals in the box can be multiplexed onto just one fiber. Inherently portable, each unit is ready for field applications or can be rack mounted with optional rack mount kits. The entire VB series is compatible with our openGear line. openGear is an industry standard, 2 RU card frame with DashBoard monitoring.

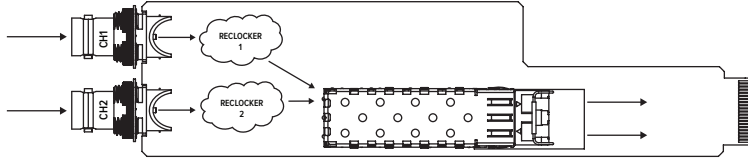
SYSTEM VIEW



FEATURES

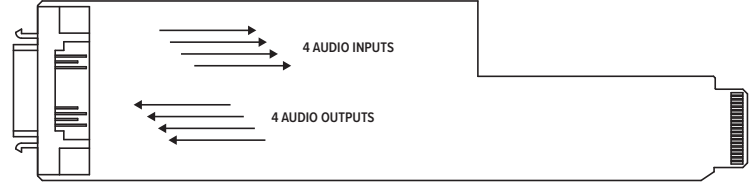
DUAL 3G-SDI VIDEO TRANSMITTER

2 SDI Inputs



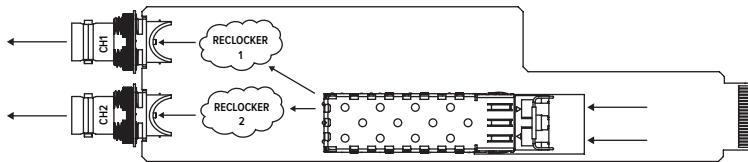
ANALOG AUDIO TRANSCIEVER

4 Analog Audio Inputs, 4 Analog Audio Outputs



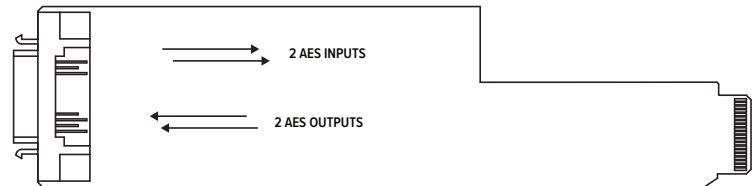
DUAL 3G-SDI VIDEO RECEIVER

2 SDI Outputs



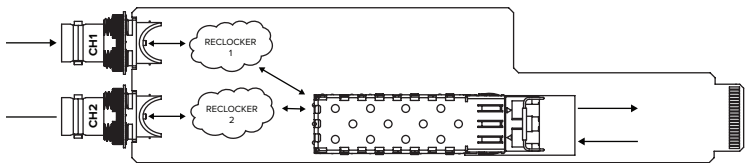
AES AUDIO TRANSCIEVER

2 AES Audio Inputs, 2 AES Audio Outputs



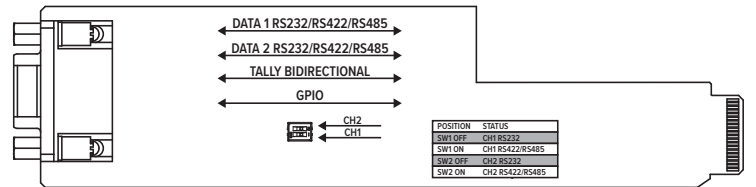
3G-SDI VIDEO TRANSCIEVER

1 SDI Input, 1 SDI Output



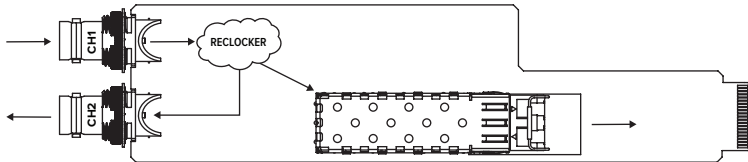
SERIAL DATA/TALLY/GPIO TRANSCIEVER

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



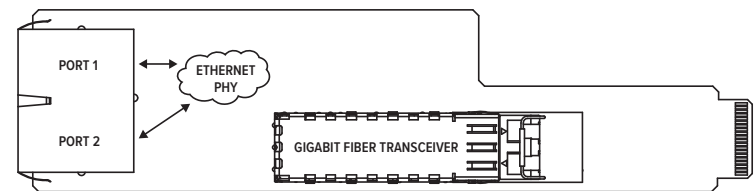
3G-SDI VIDEO TRANSMITTER

1 SDI Input, 1 BNC Loop Out



GIGABIT ETHERNET TRANSCIEVER

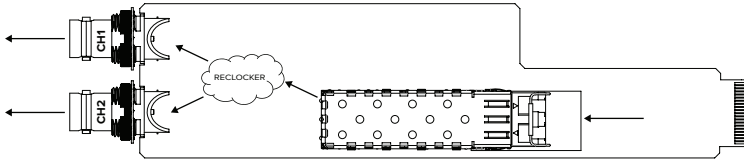
2 Port Ethernet hub/switch



FEATURES (CONT.)

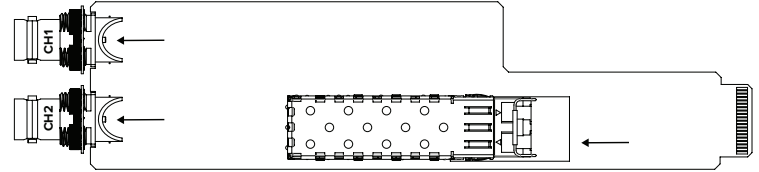
3G-SDI VIDEO RECEIVER

2 SDI Outputs, same Signal



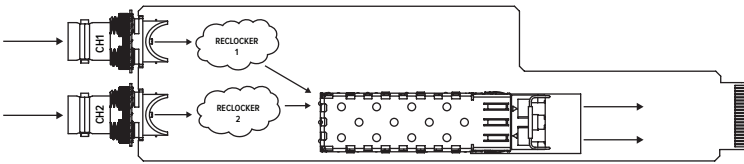
GENLOCK/SYNC

Tri-Level Sync/Genlock



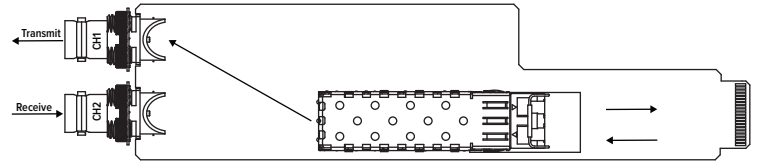
DUAL 12G-SDI VIDEO TRANSMITTER

2 SDI Inputs



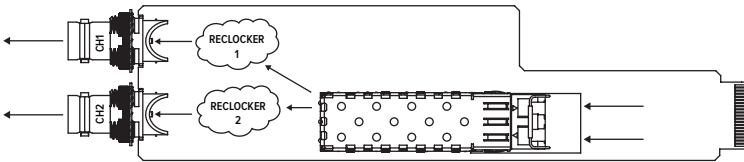
COMPOSITE VIDEO TRANSCEIVER

1 Analog Video Input, 1 Analog Video Output



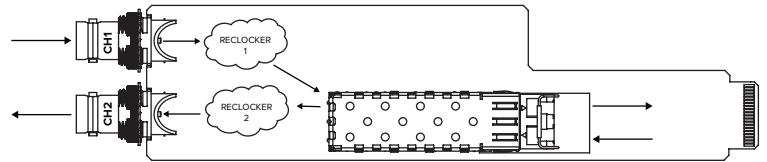
DUAL 12G-SDI VIDEO RECEIVER

2 SDI Outputs



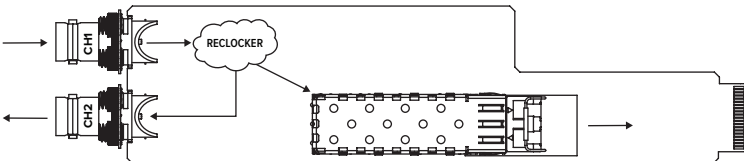
12G-SDI VIDEO TRANSCEIVER

1 SDI Input, 1 SDI Output



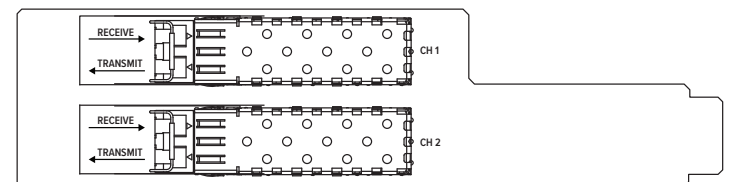
12G-SDI VIDEO TRANSMITTER

1 SDI Input with 1 BNC Loop Out



12G-SDI REPEATER

Re-energizes Optical Signals



TECHNICAL SPECIFICATIONS

Digital Video Interface

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

Input Coax EQ	50m at 11.88Gb/s 90m at 5.94Gb/s 180m at 2.97Gb/s 240m at 1.485Gb/s 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 >10 dB 1.5 to 3 GHz >7dB 3 to 6 GHz >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 (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) +/-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

Mechanical, Environmental

V4 Overall Dimensions (LxWxH)	7.25"x 4.22"x 1.75"
V6 Overall Dimensions (LxWxH)	7.25"x 5.75"x 1.75"
VX 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	-25° to +55°C
Humidity Range	0 to 95% RH Non-condensing
Power Input	2.5mm jack Center pin

ORDERING INFORMATION

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