VB-3603 LightBrix

4K Camera & POV/PTZ Fiber Transport

MultiDyne
Video & Fiber Optic Systems

An economic solution designed for 4k fiber transmission

FEATURES

▷ 4K Quad link

▷ 10/100/1000 Ethernet

▷ Genlock/Sync

▷ Remote camera and system power (optional)

APPLICATIONS

▷ 4K POV with robotic control

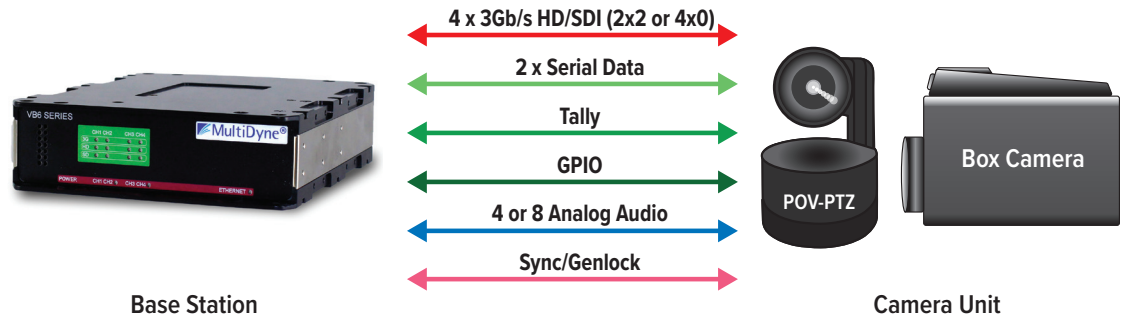▷ Camera signal extender

▷ Studio link

Transmit

Receive

The VB-3603 is part of the versatile LightBrix line of compact, rugged fiber transport products. Ideal for a box camera mounted to a robotic PTZ head, the VB-3603 will transport a full complement of camera signals, including 4K quad link, as well as an option to supply power to the transmitter and camera, via an SMPTE hybrid cable. By utilizing the SMPTE cables fiber strands for signal transport and its copper wires for power, the transmitter unit, camera and PTZ head all receive power from the base unit. This allows for flexible setup, strike, and mobility by having the entire camera position free of power outlets.

APPLICATION

4 x 3Gb/s HD/SDI (2x2 or 4x0)

2 x Serial Data

Tally

GPIO

4 or 8 Analog Audio

Sync/Genlock

Base Station

Box Camera

POV-PTZ

Camera Unit

www.MultiDyne.com

TECHNICAL SPECIFICATIONS

Digital Video

Video Connectors	BNC
Transmitter	1 to 4 inputs
Receiver	1 to 4 outputs
Standard	SMPTE 424M, 297M, 292M, M259M-C, DVB-ASI
Input Coax EQ	3 Gbps: 12OM 1.485 Gbps: 240M 143-260 Mpbs: 450M
Input Level	100mV (peak to peak)
Impedance	75 Ohms
Return Loss	>15 dB at 5MHz-1.485 GHz >10 dB up to 3 GHz
Jitter	< 0.3UI under 1MHz
Rise/fall Times	< 800ps (SD), < 130ps (HD)
Bit-error Rate	10e-12

Serial Data

Number of Channels	2
Type	RS232, RS422
Data Rate	DC – 1Mbps

Tally/GPIO

Number of GPI Inputs	1
Number of Tally Inputs	1
Number of GPI Outputs	1
Number of Tally Outputs	1
Inputs	Short to GND or TTL Low to Activate
Outputs	Relay Contact Closure (30V, 2A max)

Genlock/Sync

Number of Inputs	1
Number of Outputs	1
Type	Analog Black Burst (NTSC, PAL), HD Tri-Level

Optical

Operating Wavelengths	1471-1611nm
Tx Laser Output Power	0dBm (Class 1 Laser)
Receiver Sensitivity	-20dBm
Fiber Compatibility	Single-mode
Optical Connector Types	SC, ST, LC
Distance Limit	20km w/Single-mode and can be made as per

Overall

Dimensions	(LxWxH) 7.25"x5.75"x1.75"

Power

Power Input:	2.5mm jack
Center Pin	+
Power Rating:	nominal15w max@12 VDC

Audio

# of Input Channels	4 or 8 Input
# of output Channels	4 or 8 Output
Type	Balanced analog line levels, AES3 or ACS3, selectable in groups of 2

ORDERING INFORMATION

VB-3603 (HD video & audio)

Part #	Description
VB-3603-1A-4A-XX-ST	Two-way 3G-SDI Video Transceiver with 4 Bidirectional Analog Audio, Genlock/Sync, 2 Serial Data, 1 Tally & GPIO, ST connector
VB-3603-1B-4B-XX-ST	Two-way 3G-SDI Video Transceiver with 4 Bidirectional Analog Audio, Genlock/Sync, 2 Serial Data, 1 Tally & GPIO, ST connector
VB-3603-1A-8A-XX-ST	Two-way 3G-SDI Video Transceiver with 8 Bidirectional Analog Audio, Genlock/Sync, 2 Serial Data, 1 Tally & GPIO, ST connector
VB-3603-1B-8B-XX-ST	Two-way 3G-SDI Video Transceiver with 8 Bidirectional Analog Audio, Genlock/Sync, 2 Serial Data, 1 Tally & GPIO, ST connector
VB-3603-2A-8A-XX-ST	2 Two-way 3G-SDI Video Transceiver with 8 Bidirectional Analog Audio, Genlock/Sync, 2 Serial Data, 1 Tally & GPIO, ST connector
VB-3603-2B-8B-XX-ST	2 Two-way 3G-SDI Video Transceiver with 8 Bidirectional Analog Audio, Genlock/Sync, 2 Serial Data, 1 Tally & GPIO, ST connector
VB-3603-4T-4A-XX-ST	4 One-way 3G-SDI Video Transmitter with 4 Bidirectional Audio, Genlock/Sync & 2 Serial Data, 1 Tally & GPIO, 1 Single-mode fiber, ST connector
VB-3603-4R-4B-XX-ST	4 One-way 3G-SDI Video Receiver with 4 Bidirectional Audio, Genlock/Sync & 2 Serial Data, 1 Tally & GPIO, 1 Single-mode fiber, ST connector
VB-3603-4T-8A-XX-ST	4 One-way 3G-SDI Video Transmitter with 8 Bidirectional Audio, Genlock/Sync & 2 Serial Data, 1 Tally & GPIO, 1 Single-mode fiber, ST connector
VB-3603-4R-8B-XX-ST	4 One-way 3G-SDI Video Receiver with 8 Bidirectional Audio, Genlock/Sync & 2 Serial Data, 1 Tally & GPIO, 1 Single-mode fiber, ST connector