

YOUR #1 CHOICE FOR BROADCAST CONNECTIVITY SOLUTIONS



# Broadcast

CONNECTIVITY SOLUTIONS

# MuxLab's mission



Established in 1984

uxLab is a leading designer of valueadded connectivity hardware for the Pro AV, Broadcast, and CCTV markets. Since 1984, we have continued to support our main mission to provide our customers with innovative and industry leading designs and the dependability you need.

MuxLab understands the need for quality, performance, and reliability and we design & engineer all of our products in Canada with this focus in mind. For over 30 years, MuxLab has been at the forefront of the advances in signal distribution and connectivity. Keeping up with emerging technology, our goal is to provide easy to use and affordable solutions for transferring all forms of Audio/Video, Broadcast, and CCTV signals.

Let us join you on your next installation and help transmit your signals with ease.

Sincerely,

Daniel Assaraf President Montreal, Canada

# Proud to be Canadian

MuxLab is proud to design and engineer its products in Canada, by Canadian professionals. We create jobs and support local manufacturing, something we're proud of today and every day.







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# 6G-SDI Extenders

#### 6G-SDI Extender Kit over UTP

Part # 500730



The 6G-SDI Extender over UTP is a unique new solution from MuxLab for extending SDI cameras or other SDI sources up to 4K @ 30Hz resolution with the added benefit of extending the Hi-Resolution signal up to 330ft (100m) using HDBaseT technology. Standard Cat5e/6 UTP cable is used for the extension. The pair of units (Transmitter and Receiver) use PoE for power and only require the Receiver (Rx) side to be powered. The 6G-SDI Extender can extend four (4) HD-SDI signals, two (2) 3G-SDI signals , or one (1) 6G-SDI signal.

#### **Application**

Video production, broadcasting, camcorder, studio-to-studio, postproduction, live events, medical imaging displays, mobile video, SDI routing, SDI-CCTV, medical imaging

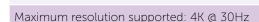
#### **Key Features**

Up to 330ft (100m) using HDBaseT technology









Supported modes: SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 424M, SMPTE 425M, SMPTE ST-2081

Supports one 6G-SDI source, two 3G-SDI sources, or four HD-SDI sources





Supports all 6G channel configurations (1/2/4)

Automatic SDI Link recognition and configuration

Automatic activation of long reach mode 500ft (150m) when an 3G signal is detected  $\,$ 

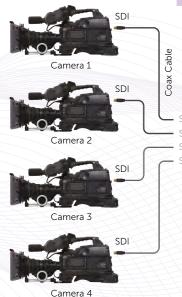
USB interface for field upgradable firmware and diagnostics



PoE powered, power Transmitter from Receiver

Ethercon Connectivity for ruggedized usage

3/8"-20 mounting holes





M500730 (Cat5e/6) TX Unit or M500732 (Fiber Optic) TX Unit 300ft / (100m) on Cat 5/6 or 1310ft / (400m) on multimode fiber (OM4) 132000ft / (40Km) on singlemode fiber (Some SFP+ module support longer distance)



# **6G-SDI Extender over Fiber Optic**

Part # 500732





The 6G-SDI Extender over Fiber Optic is a unique solution from Muxlab for extending SDI based cameras or other SDI sources up to 4K @ 30Hz resolution. The 6G-SDI Extender can extend four (4) HD-SDI sources, two (2) 3G-SDI sources, or one (1) 6G-SDI source.

**Application** 

Video production, broadcasting, camcorder, studio-to-studio, postproduction, live events, medical imaging displays, mobile video, SDI routing, SDI-CCTV, medical imaging

**Key Features** 

985ft (300m) OM3 Fiber (500732)







1310ft (400m) OM4 Fiber (500732)

13000ft (10km) Singlemode fiber (500732-SM-10)

132000ft (40km) Singlemode Fiber (500732-SM-40)



264,000ft (80km) Singlemode Fiber (500732-SM-80)

Supported modes: SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 424M, SMPTE 425M. SMPTE ST-2081

Supports all 6G channel configurations (1/2/4)

Automatic SDI Link recognition and configuration

USB interface for field upgradable firmware and diagnostics



Ethercon Connectivity and Aluminum Enclosure for ruggedized use

Supports RS232 over Fiber Optic

HDMI port on receiver unit (display side)

## Typical Application 500730, 500732



# **6G-SDI Extender Over UTP** with Ethernet

Part # 500733



The 6G-SDI Extender over UTP is a unique solution from MuxLab for extending SDI cameras or other SDI sources up to 4K resolution at up to 330ft (100m) using standard Cat5e/6 UTP cable. This multichannel extender supports up to 6Gbps of data throughput over the UTP link and allows for versatile combinations of sources, including one 6G-SDI source, two 3G-SDI sources or four HD-SDI sources, plus transmission of two Ethernet signals which may be used as return channels, and a bidirectional RS232 pass-through. The Ethernet port of the 500733 can be used for AV monitoring and talkback, while the RS232 pass-through supports return of tally light, camera control unit (CCU) and control of end devices.

Application	Video production, broadcasting, camcorder, studio-to-studio, postproduction, live events, medical imaging displays, mobile video, SDI routing, SDI-CCTV, medical imaging
Key Features	Extend up to 4K @ 30Hz to 330ft (100m) over Cat5e/6
<i>66</i> <b>₽</b> 74K	Multichannel support for one 6G-SDI source, two 3G-SDI sources, or four HD-SDI sources
Cat5e/6 UHD-4K	Transmits two Ethernet signals which may be used as a return channel for AV monitoring and talk-back
PoE Ethernet	Supports RS232 pass-through for remote control and for tally light and camera control unit (CCU) $$
	Supported modes: SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 424M, SMPTE 425M
	Supports all 6G channel configurations (1, 2 or 4 BNC)
	Automatic SDI Link recognition and configuration
	Automatic activation of long reach mode 500ft (150m) when 3G signal detected
	Transmitter may be PoE powered from Receiver
	Ethernet port1 can power a PoE device
	USB interface for field upgradable firmware & diagnostics
	Ethercon connectivity and aluminum casting enclosure for ruggedized use

#### **6G-SDI Extender Over Fiber Optic** with Return Channel

Part # 500734





The 6G-SDI Extender over Fiber Optic with Return Channel is a unique solution from MuxLab for extending SDI sources up to 4K resolutions to a distance of up to 400m (1300ft) of OM4 multi-mode fiber (500734), 10km (33,000ft) of single-mode fiber (500734-SM10), 40km (132,000ft) of single-mode fiber (500734-SM40), and 80km (264,000ft) of single-mode fiber (500734-SM80). The product can transmit up to 9Gbps of data throughput over the fiber link, and supports simultaneous transmission of mixed signals such as one 6G-SDI signal + one 3G-SDI, or two 3G-SDI signals + two HD-SDI signals, and many other combinations. The device supports one input and one output SDI port, plus three directional SDI ports that can be individually configured. The SDI return channel may be used for AV monitoring and talk-back, while the RS232 passthrough supports return of tally light, camera control unit (CCU) and control of end devices.

#### **Application**

Video production, broadcasting, camcorder, studio-to-studio, postproduction, live events, medical imaging displays, mobile video, SDI routing, SDI-CCTV, medical imaging

#### **Key Features**





















Extend up to 4K @ 30Hz resolution from 300m to 80km over multimode or singlemode fiber

Supports multichannel transmission, and can simultaneously transmit up to 9Gbps of data

Accepts mixed signal transmission up to one 6G-SDI signal + one 3G-SDI, or two 3G-SDI signals + two HD-SDI signals, and many other combinations in any direction, including the return channels

Supports one input and one output SDI port, plus three configurable directional SDI ports

Supports RS232 pass-through for remote control and as a return channel for tally light and camera control unit (CCU)

Supported modes: SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 424M, SMPTE 425M, SMPTE ST-2081

Supports all 6G channel configurations (1, 2, or 4 BNC)

Automatic SDI Link recognition and configuration

400m (1300ft) using OM4 multi-mode fiber (model 500734)

10km (33,000ft) using single-mode fiber (model 500734-SM10)

40km (132,000ft) using single-mode fiber (model 500734-SM40)

80km (264,000ft) using single-mode fiber (model 500734-SM80)

# 6G-SDI / 3G-SDI / HD-SDI Baluns & Extenders

#### **HD-SDI** Balun

Part # 500701/500701-2PK



The HD-SDI Balun allows one HD-SDI signal to be transmitted up to 150ft (45m) via Cat5e/6 cable at HD resolution in a point-to-point configuration. The HD-SDI Balun supports transmission of up to 1.5Gbps uncompressed, un-encrypted digital video (optionally including embedded Audio and/or Time Code) within television facilities and between professional video equipment.

Application	Video production, broadcasting, HD camcorder, studio-to-studio, post-production, live events, medical imaging displays, mobile video, HD/SD routing, HD-CCTV, medical imaging
Key Features	Supports SD and HD resolutions
C HD	Up to 150ft (45m) via Cat5e/6 cable @ HD (720p/1080i)
Cat5e/6 SDI	Up to 400ft (122m) via Cat5e/6 cable @ SD
	Cast aluminum enclosure for EMI/RFI shielding

#### **3G-SDI Extender Kit**

Part # 500700



The 3G-SDI Extender allows 3G-SDI to be transmitted up to 330ft (100m) via Cat5e/6 cable in a point-to-point configuration. The 3G-SDI Extender supports transmission of up to 2.97/3.0Gbps uncompressed, un-encrypted digital video (optionally including embedded Audio and/or Time Code) within television facilities and between professional video equipment.

Application	Video production, broadcasting, camcorder, studio-to-studio, post-production, live events, medical imaging displays, mobile video, SDI routing, SDI-CCTV, medical imaging
Key Features	Up to 330ft (100m) via Cat5e cable
3G 💶	Up to 400ft (122m) via Cat6 cable
SDI Cat5e/6	Supports SDI-SMPTE 259M-C (270Mbps) HD-SDI-SMPTE 292M (1. 485, 1.485/1.001 Gbps) HD-SDI-SMPTE 424M/425M (2.97/3.0 Gbps)
	LED diagnostics: sync, SDI detect

## LongReach™ 3G-SDI Extender Kit

#### Part # 500702



The LongReach™ 3G-SDI Extender Kit features LED diagnostics for sync, signal detect and supports transmission of up to 2.97/3.0 Gbps uncompressed, un-encrypted digital video within television facilities and between professional video equipment. It extends 3G-SDI signals up to 500ft (152m) via Cat5e/6 cable in a point-to-point configuration.

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Up to 500ft (152m) via Cat5e/6 cable





Supports cost-efficient HDMI displays versus more costly 3G-SDI monitors

Supports SDI-SMPTE 259M-C (270Mbps) HD-SDI-SMPTE 292M (1. 485, 1.485/1.001 Gbps) HD-SDI-SMPTE 424M/425M (2.97/3.0 Gbps)

LED diagnostics: sync, SDI detect

#### **3G-SDI to HDMI Extender Kit**

Part # 500715



The 3G-SDI to HDMI Extender Kit (500715) converts 3G-SDI to HDMI and then transmits it up to 330ft (100m) via Cat5e/6 cable at all resolutions in a point-to-point configuration. The 3G-SDI to HDMI Extender supports transmission of up to 2.97/3.0Gbps uncompressed, un-encrypted digital video (optionally including embedded Audio and/or Time Code) within television facilities and between professional video equipment.

#### **Key Features**

Up to 330ft (100m) via Cat5e cable







Up to 400ft (122m) via Cat6 cable

Supports cost-efficient HDMI displays versus more costly 3G-SDI monitors

Supports SDI-SMPTE 259M-C (270Mbps) HD-SDI-SMPTE 292M (1. 485, 1.485/1.001 Gbps) HD-SDI-SMPTE 424M/425M (2.97/3.0 Gbps)

LED diagnostics: sync, SDI detect

# LongReach™ 3G-SDI to HDMI Extender Kit

Part # 500716



The LongReach™ 3G-SDI to HDMI Extender Kit converts 3G-SDI to HDMI and then transmits it up to 500ft (152m) via Cat5e/6 cable at all resolutions in a point-to-point configuration.

**Key Features** 

Up to 500ft (152m) via Cat5e/6 cable







Supports SDI-SMPTE 259M-C (270Mbps) HD-SDI-SMPTE 292M (1.485, 1.485/1.001 Gbps) HD-SDI-SMPTE 424M/425M (2.97/3.0 Gbps)

LED diagnostics: Power, Sync detect

#### **3G-SDI Fiber Extender Kit**

Part # 500710



The 3G-SDI Fiber Extender Kit (500710) allows one 3G-SDI channel to be transmitted up to 19mi (30km) via one singlemode fiber in a point-to-point configuration. The 3G-SDI Fiber Extender supports transmission of up to 2.97/3.0Gbps uncompressed, un-encrypted digital video within television facilities and between professional video equipment. The 500710 includes a Hirose power cable for SDI camcorder applications and comes with a hard plastic carry case.

Application	Video production, broadcasting, camcorder, studio-to-studio, post-production, live events, medical imaging displays, mobile video, SDI routing, SDI-CCTV, medical imaging
Key Features	Up to 19mi (30km) via one singlemode fiber
3G (#)	Supports up to 3G-SDI
SDI Fiber Optic	LED diagnostics: Power, Sync detect
	Includes Hirose power cable
	Includes hard plastic carry case

#### **6G-SDI Fiber Extender Kit**



The 6G-SDI Fiber Extender Kit allows 6G-SDI to be transmitted up to 60,000ft (20km) via a one singlemode fiber cable in a point-to-point configuration at all specified bit rates. The 6G-SDI Fiber Extender Kit supports transmission of up to 6.0Gbps of digital video within television broadcasting facilities and between professional video equipment.

Application	Video production & Broadcasting, Studio-to-studio & Post production, Outside broadcasting vehicle, Mobile video & Live Events, SDI camcorder, Medical imaging display, 6G/3G/HD-SDI routing, 6G/3G/HD-SDI CCTV
Key Features	Supports 6G/3G/HD-SDI signals
SG & PAV	Supports up to 4K/30 video
66 Fiber Ottic	Extend transmission up to 60,000ft (20km) over singlemode fiber
	LED diagnostics: Power, Sync detect

#### **3G-SDI to HDMI Converter**

Part # 500717



The 3G-SDI to HDMI Converter allows SDI equipment to be connected to an HDMI Display. The unit converts the SDI signal to HDMI, supporting resolutions of 480i (SD-SDI), 720p/1080i (HD-SDI) and 1080p (3G-SDI). The 3G-SDI to HDMI Converter provides a low jitter and re-clocked outputs allowing for unit daisy chain.

Key Features	Auto 3G/HD/SD-SDI detection & conversion
3G 🚍	View SDI source video on a lower cost HDMI display
3G SDI HDMI	Supports up to 1080p
	3G-SDI up to 300ft (90m) via RG59 coax
	Low jitter & re-clocked output
	Supports daisy chain
	Wall mountable
	LED diagnostics

# SDI over IP **Extended Distribution**

## 3G-SDI / RS232 over IP **Extender Kit with PoE**

Part # 500756



The 3G-SDI / RS232 over IP Extender Kit with PoE allows SDI equipment to be connected over an IP network @ 1080p in a point-to-point configuration, with Transmitters and Receivers connected up to 330ft (100m) from an Ethernet Switch. Point-to-Multipoint, and Multipoint-to-Multipoint is possible by connecting several Transmitters and Receivers to the same network. Supports 100's of Transmitters and Receivers on a single network, depending on network bandwidth. The unit supports PoE (PD) and may be powered by a PoE (PSE) Ethernet Switch.

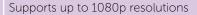
#### **Key Features**











Motion JPEG compression with very low latency

Supports RS232 and one way IR transmission for remote control

Transmission over an IP Network, at up to 330ft (100m) from the Ethernet Switch

Supports 100's of Transmitters and Receivers depending on network bandwidth

PoE powered

Control via Windows-browser or via a web device (mobile, tablet)

May be controlled using model 500811 (Pro Digital Network Controller)

# Control of MuxLab IP Products

## **Pro Digital Network Controller**

Part # 500811



The Pro Digital Network Controller is a Linux-based PC that allows users to control hub-installed MuxLab over IP products via an Ethernet Web interface. When installed on a LAN, the Pro Digital Network Controller can scan for MuxLab over IP products and allows the user to configure and control these products over the network.

#### **Key Features**

Centralizes control of MuxLab AV over IP products





Provides a web interface to manage & control MuxLab products Provides a mobile web interface for smartphones and tablets

Provides control APIs for third party control integration

Supports I/O presets to be configured

Serves as a base platform to develop automation control applications

Supports Software upgrades

# Dante/Quad Channel Audio PoE Gateway



The Dante/Quad Channel Audio PoE Gateway permits non-Dante compatible analog audio equipment to interface with Dante compatible professional audio equipment. The unit allows Dual two-channel or Quad single-channel full range (20Hz to 20KHz) balanced analog audio signals to be transmitted over the network to Dante compatible professional audio equipment. Dual two-channel or Quad single-channel balanced analog audio signals may also be received from Dante compatible equipment in the same manner. The unit may be connected via Cat5e/6 cable up to 330ft (100m) from an Ethernet Switch.

KHz

Application	Video production & Broadcasting, Studio-to-studio & Post production, Outs broadcasting vehicle, Mobile video & Live Events, SDI camcorder, Medical imaging display, 6G/3G/HD-SDI routing, 6G/3G/HD-SDI CCTV
Key Features	Interface analog audio equipment to Dante audio equipment
<i>66</i>	Supports Quad single-channel full range balanced analog audio from 20Hz to 20k
4K	Transmission up to 770ft (100m) over CatEa/6



Transmission up to 330ft (100m) over Cat5e/6

Supports Quad single-channel balanced analog audio-in and Quad single-channel balanced analog audio-out from Dante audio equipment.

Balanced audio ports may be interfaced to unbalanced audio ports when only 2 of 3 pins are used per channel

IP managed for remote control

Control via any web device (mobile, tablet) with use of model 500811 (Pro Digital Network Controller)

PoE powered

Control MuxLab AV over IP solutions
via the 500811 (Pro Digital Network Controller) web and mobile
interface, through a PC web browser, smartphone, and tablet.
The web and mobile interface may also be managed via third party \*
software, either under user control or in an automated fashion.

## **AV over IP Management**

The Pro Digital Network Controller web and mobile interface allows Muxlab's AV over IP Transmitters to be routed to Muxlab's AV over IP Receivers thereby enabling a virtual matrix switch to be set up between multiple HDMI & SDI sources and HDMI & SDI displays and SDI equipment (such as mixers) via a Gigabit Ethernet LAN. 100's of Transmitters and Receivers may be supported

on a single LAN, depending on network bandwidth. The Pro Digital Network Controller web and mobile interface supports the addition or removal of Transmitters and Receivers as needed. Changing Transmitter to Receiver routing configurations between point-to-point, point-to-multipoint, and multipoint-to-multipoint arrangements is accomplished easily under software control. The resulting system allows for a truly flexible and expandable AV connectivity solution.



# Splitters

## 12G-SDI 1×6 Splitter, 4K60

Part # 500718





The 12G-SDI 1x6 Splitter, 4K/60 allows one (1) 12G/6G/3G/HD/SD-SDI source to be distributed and amplified to up to six (6) 12G/6G/3G/HD/SD-SDI displays. The splitter supports up to 4K (3840 X 2160) video and HD audio, including 480i (SD-SDI), 720p/1080i (HDSDI), 1080p (3G-SDI), 4K/30 (6G-SDI) and 4K/60 (12G-SDI).

The device automatically detects the 12G/6G/3G/HD/SD-SDI signal and re-clocks and regenerates the signal at the output for extending distances between source and displays. Additionally, all connectors are on the rear panel for neater cabling.

#### **Key Features**

Distribute one 12G-SDI source to six displays







Supports up to 4K @ 60Hz, including 12G/6G/3G/HD/SD-SDI

Automatically detects re-clocks and regenerates the 12G/6G/3G/HD/SD-SDI signal

LED diagnostics

Connectors on rear for neater cabling

## **3G-SDI 1×4 Splitter**

Part # 500719



The 3G-SDI 1x4 Splitter allows one (1) 3G/HD/SD-SDI source to be distributed and amplified to up to four (4) 3G/HD/SD-SDI displays. The splitter supports up to 1080p video, including 480i (SD-SDI), 720p/1080i (HD-SDI), and 1080p (3G-SDI). The device automatically detects the 3G/HD/SD-SDI signal and re-clocks and regenerates the signal at the output for extending distances between source and displays.

#### **Key Features**

Distribute one 3G-SDI source to four displays





Supports up to 1080p @ 60Hz, including 3G/HD/SD-SDI

Automatically detects re-clocks and regenerates the 3G/HD/SD-SDI signal

LED diagnostics

# Test Equipment

## HDMI 2.0 3G-SDI Signal Generator

Part # 5008<u>3</u>0



This Signal Generator is able to generate SD/HD/3G SDI and HDMI 2.0 test patterns in a full range of resolutions up to 4K@ 60Hz (4:4:4). The unit assists users in validating the capabilities and proper operation of their sink devices. The user may select from various test patterns, resolutions, refresh rates, color spaces and other related parameters. When used with the 500831 Signal Analyzer, a useful set of cable connectivity/quality tests, and device compatibility tests can be performed to help identify problems. The device is an exceptional tool at an attractive price for any AV engineer/developer, integrator and installer.

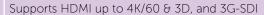
#### **Key Features**











Supports RGB4:4:4, YUV4:2:2, YUV4:2:0 & Deep Color

Supports 33 preset patterns & 32 preset resolutions

3" LCD panel for pattern preview & menu settings

Supports 7 audio sample rates

Supports an internal rechargeable Lithium-ion battery

Supports HDCP on/off, for testing HDCP 2.2 & 1.4

Supports EDID management

## HDMI 2.0/3G-SDI Signal Analyzer

Part # 500831



This Signal Analyzer is able to analyze SD/HD/3G SDI and HDMI 2.0 test patterns in a full range of resolutions up to 4K@ 60Hz (4:4:4). The unit assists users in validating the capabilities and proper operation of their source devices. When used with the 500830 Signal Generator, a useful set of cable connectivity/ quality tests, and device compatibility tests can be performed to help identify problems. The device is an exceptional tool at an attractive price for any AV engineer/developer, integrator and installer.

#### **Key Features**









Supports HDMI up to 4K/60 & 3D, and 3G-SDI

Supports RGB4:4:4, YUV4:2:2, YUV4:2:0 & Deep Color

Supports an HDMI cable test function

Displays AV signal characteristics

3" LCD panel for pattern preview & menu settings

Supports 7 audio sample rates

Supports an internal rechargeable Lithium-ion battery

VU metter supported on LCD

Supports HDCP 2.2 & 1.4

Supports EDID management

# **KVM / Extenders**

#### KVM HDMI over IP PoE Extender Kit

Part # 500770



The KVM HDMI over IP PoE Extender Kit allows HDMI & USB equipment to be connected up to 330ft (100m) over an Ethernet LAN, supporting 1920×1200 and 1080p resolution @ 60Hz via Cat5e/6 cable. Each Transmitter terminates to a computer server/workstation via an HDMI & USB port, and each Receiver terminates to an HDMI display and up to 4 USB devices such as a keyboard, mouse, printer, drawing pad, etc. The audio and mic port on the server/workstation are also extended. A single Receiver can be switched via hotkey sequences to any Transmitter on the network, allowing a single operator to manage numerous servers/workstations, in a distributed KVM application.

# Key FeaturesOne operator can manage multiple servers/workstationsSupports HDMI up to 1920x1200 and 1080p @ 60HzReceiver side includes a 4-port USB hub, for KVM applicationsUp to 330ft (100m) over Cat5e/6Supports 100's of Transmitters & Receivers depending on network bandwidthSupports audio insert & mic-out (TX), and audio extract & mic-in (RX)

#### **KVM DVI over IP PoE Extender Kit**

Part # 500771



The KVM DVI over IP PoE Extender Kit allows DVI & USB equipment to be connected up to 330ft (100m) over an Ethernet LAN, supporting 1920×1200 and 1080p resolution @ 60Hz via Cat5e/6 cable. Each Transmitter terminates to a computer server/workstation via a DVI & USB port, and each Receiver terminates to a DVI display and up to 4 USB devices such as a keyboard, mouse, printer, drawing pad, etc. The audio and mic port on the server/workstation are also extended. A single Receiver can be switched via hotkey sequences to any Transmitter on the network, allowing a single operator to manage numerous servers/workstations, in a distributed KVM application.

Key Features		One operator can manage multiple servers/workstations
		Supports DVI up to 1920x1200 and 1080p @ 60Hz
KVM DVI	DVI POE	Receiver side includes a 4-port USB hub, for KVM applications
		Up to 330ft (100m) over Cat5e/6
USB 1.1 Audio	Mic	Supports 100's of Transmitters & Receivers depending on network bandwidth
= -		Supports audio insert & mic-out (TX), and audio extract & mic-in (RX)
LISP 2 O		

#### DVI / USB2.0 HDBaseT **Extender Kit**

Part # 500391





The DVI / USB2.0 HDBaseT Extender Kit (500391) allows one DVI channel and one USB2.0 channel to be transmitted up to 330ft (100m) at all resolutions up to 1920x1200 via single Cat5e/6 cable, and up to 230ft (70m) at 4K (3840x2160). The Receiver features a 4-port USB2.0 hub for transferring multiple USB2.0 data transmissions, well suited for KVM applications.

#### **Key Features**

Extends DVI and one USB2.0 channel via single Cat5e/6 cable

Up to 230ft (70m) at 4K @ 30Hz (4:4:4) and 4K @ 60Hz (4:2:0)

Up to 330 ft (100m) at all resolutions up to 1920x1200 via one Cat5e/6









HDBaseT technology

#### **HDMI/USB2.0 Extender Kit**

Part # 500457





The HDMI / USB2.0 Extender Kit allows one HDMI and one USB 2.0 channel to be extended up to 330ft (100m) at all resolutions up to 4K @ 60Hz (4:2:0) via Cat5e/6 cable. The Receiver features a 4-port USB2.0 hub for transferring multiple USB2.0 data transmissions, well suited for KVM applications.

#### **Key Features**

Extends HDMI and USB 2.0 via single Cat5e/6 cable

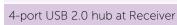
Supports RS232 and IR transmission for remote control

Up to 330ft (100m) at all resolutions up to 4K @ 30Hz (4:4:4) & 4K @ 60Hz (4:2:0)















Uncompressed signals

USB 2.0 (250Mbps max)

#### **USB2.0 4-Port Extender Kit**



The USB 2.0 4-Port Extender Kit enables USB 2.0 connectivity over Cat5e/6 at data rates up to 480Mbps & extends true USB up to 330ft (100m) over single Cat5e/6 cable. This USB 2.0 4-Port Extender Kit is true plug and play, it requires no additional software drivers, and is compatible with all major operating systems. The unit supports a wide variety of USB extension applications including security, industrial control, digital signage, scientific data acquisition and other implementations of USB standards.

#### **Key Features**

True plug and play, no driver installation required





Extends USB 2.0 devices up to 330ft (100m) over Cat5e/6 cable

Supports all USB device types: Control, Interrupt, Bulk and Isochronous at up to 480Mbps

Compatible with major operating systems

Aluminum enclosure and wall mount

#### **USB 4-Port Extender Kit**

Part # 500070





The USB 4-Port Extender Kit allows up to four (4) USB 1.1 full speed) and low speed devices to be connected to a USB host via Cat5E/6 cable. The USB Extender supports up to 150ft (46m) in a point-to-point connection. The kit come with one (1) host side adapter, one (1) device side transceiver and one (1) power supply for devices requiring 500 mA. The USB Extender Receiver may be installed in a MuxLab rack, an in wall and surface mount accessories for neater installation.

#### **Key Features**

Supports USB 1.1 (low and full speed)





Four (4) port capacity

Up to 150ft (46m) via Cat5E/6

Bus powered

Plug and play

External PSU for 500mA requirements

US, UK and Euro blades

<sup>\*4</sup>K resolution 3840 X 2160 @ 24, 25 & 30 Hz.

## **DVI/Audio Extender Kit**



The DVI/Audio Extender Kit (500390) allows one DVI channel and one line level 2CH audio signal to be transmitted up to 230ft (70m) at all resolutions up to 1080p via one (1) Cat5e/6 cable in a point-to-point configuration.

Key Features
--------------

Extends DVI and 2CH audio via Cat5e/6 cable

Up to 230ft (70m) at all resolutions up to 1080p













\*4K resolution 3840 X 2160 @ 24, 25 & 30 Hz.

Up to 115ft (35m) at 4K @ 30Hz (4:4:4)

HDBaseT technology

# **DVI Fiber Optic Extender Kit**

Part # 500463



Extend DVI over one multimode fiber optic cable up to 3,280ft (1km). The MuxLab DVI Fiber Optic Extender Kit lengthens your DVI display from your video source using a single strand of multimode fiber optic cable. Automatic EDID programming enables simple synchronization of the video source to the display.

#### **Key Features**

Extends DVI devices up to 3,280ft (1km)





Supports video resolutions up to 1080p and 1920 x 1200

Uses single-strand multimode fiber optic cable

Easy EDID programming enables simple synchronization

Supports DDWG standard for DVI compliant monitors

Video Amplifier Bandwidth: 165MHz (single link)

Input DDC Signal: 5 volts p-p (TTL)

DVI Connector: Type DVI-D male

Link Connector: SCPower Supply: 5VDC

#### **HDMI 4K Fiber Extender Kit**

Part # 500460



The HDMI Fiber Extender Kit (500460) allows HDMI equipment to be connected up to 1,000 ft (305m) @ 4K/30 resolution via one (1) 50/125  $\mu m$  Multimode fiber cable in a point-to-point configuration. The kit comes with one (1) Transmitter and one (1) Receiver as well as an IR Emitter (500998) and IR Sensor (500999) for remote control applications.

#### **Key Features**

Up to 1,000 ft (300m) via a single multimode fiber







IR Control (IR Sensor and IR Emitter included)

SC connector multimode fiber 62.5 um/125 um.



Supports RS232

\*4K resolution 3840 X 2160 @ 24, 25 & 30 Hz.

#### Mini HDMI Fiber 4K Extender Kit

Part # 500461



The Mini HDMI Fiber 4K Extender Kit allows an HDMI source, such as BluRay or PC, to be distributed over extended distances of up to 1,000 ft (305m) to a screen or monitor using Duplex Multimode Fiber cables at resolutions of up to 4K30. Powered via mini USB connectors, this space efficient extender kit is ideal for those hard-to-reach installations where space is crucial.

#### **Key Features**

HDMI 1.4a support





HDCP support
Compact design

Distance up to 305m using LC Duplex multimode 50/125  $\mu m$  OM3 fiber cable

Power using micro USB connector

Metallic enclosure for better heat dissipation

\*4K resolution 3840 X 2160 @ 24, 25 & 30 Hz.

### **HDMI Over Coax Extender Kit**



The HDMI over Coax Extender Kit (500465) allows an HDMI source to be connected to an HDMI receiver up to 250ft (76m) at 1080p resolution via one (1) coax cable in a point-to-point configuration. Furthermore, the product may be cascaded via the HDMI over Coax Receiver (500465-RX) in order to support multi-display applications.

**Key Features** 

Supports HDMI over one RG59 coax cable



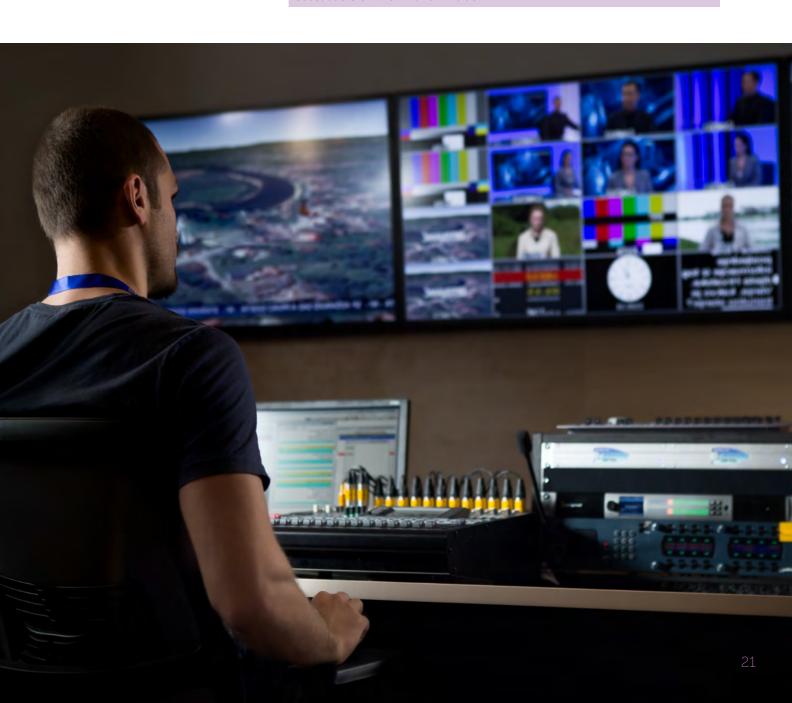


Up to 250ft (76m) at 1080p resolution

Up to 500ft (152m) at 1080i/720p resolution

Ideal for harsh electrical environments

Cascadable on the TX and RX side



# DisplayPort

# DisplayPort to HDMI Active Adapter

Part # 500501



The DisplayPort to HDMI Active Adapter (500501) allows a DisplayPort source such as a PC or Laptop to be connected to an existing HDMI display or projector. The unit does not require external power to operate and comes with a lifetime warranty.

Application	Schools, government, offices, hospitals, financial institutions, hotels and residential complexes.
Key Features	Converts DisplayPort to HDMI
<b>■ D</b> ''4K	HDCP Compliant
HDMI Display Port UHD-4K	Supports up to 4K (3840 x 2160) @ 24, 25, and 30Hz
	Active device for improved compatibility
	No external power supply required
	Includes a pigtail for convenient connectivity in tight spaces
	Lightweight
	Lifetime warranty

# DisplayPort 1.2a Fiber Extender Kit

Part # 500502





The DisplayPort 1.2a Fiber Extender Kit enables the user to transmit WQUXGA (3840×22400) video at 60Hz signal up to 330ft (100m), with any form of scaling or data compression being applied to the signal. This device supports a total data throughput of 21.6Gbps (5.4Gbps per lane).

Application	Schools, government, offices, hospitals, financial institutions, hotels and residential complexes.
Key Features	Extend DisplayPort connectivity via multi-mode fiber
	Supports the DisplayPort 1.2a standard
Display Port State Optic	Up to 330ft (100m) over 50/125m multi-mode fiber
	Supports WQUXGA (3840x2400) resolution @ 60Hz
	Bandwidth of 21.6Gbps
	Supports Dual-Mode DP (DP++)
	Supports auxiliary/I2C channel over fiber
	Compact Metal Enclosure for a robust and easy installation

# DisplayPort 1.2a 1x2 Splitter, SST

Part # 500505



The DisplayPort 1.2a 1x2 Splitter, SST allows you to duplicate identical DisplayPort 1.2a content from one DisplayPort connector to two monitors. The splitter supports video resolutions up to 4K and PCM Audio up to 7.1-Channel and up to 192 kHz sampling rate, supporting a Single Stream Transport (SST).

Application	Schools, government, offices, hospitals, financial institutions, hotels and residential complexes.
Key Features	Duplicate identical DisplayPort 1.2a content from one DisplayPort connector to two monitors
ULTRA HD Display Port	Supports data rate of 5.4 Gbps per lane with a total of 21.6 Gbps link rate
	HDMI link rate: 3.2 Gbps/data pair
	Supports dual mode DisplayPort
	4K at 60Hz, 24 bits/pixel in DP 1.2a configuration
	1080p at 240Hz, 24 bits/pixel
	Supports Single Stream Transport (SST)

# DisplayPort 1.2a 1x2 Hub, MST

Part # 500506



The DisplayPort 1.2a 1x2 Hub, MST (500506) is a device that allows you to extend different DisplayPort 1.2a content from one DisplayPort connector to two monitors. The hub supports video resolutions up to 4K and PCM Audio up to 7.1-Channel and up to 192 kHz sampling rate, and supports Multi-Stream Transport (MST) of up to eight streams.

Application	Residential, apartment, condominiums, hotels, offices, schools, hospitals, airports, trading floors.
Key Features	Extend different DisplayPort 1.2a content from one DisplayPort connector to two monitors
	Supports data rate of 5.4 Gbps per lane with a total of 21.6 Gbps link rate
Display Port	HDMI link rate: 3.2 Gbps/data pair
Total	Supports dual mode DisplayPort
	4K at 60Hz, 24 bits/pixel in DP 1.2a configuration
	1080p at 240Hz, 24 bits/pixel
	Supports Multi-Stream Transport (MST) of up to eight streams

# CATV & RF Distribution Baluns & Hubs

#### **CATV Balun II**

Part # 500302, 500302-2PK



The CATV Balun II (500302) allows traditional 75-ohm coaxial cable to be replaced by a single pair of Cat 5e/6 UTP cable in the CATV, VHF and FM environments in certain applications. Used in pairs, the CATV Balun II allows broadband CATV equipment to be integrated into structured cabling systems thereby allowing CATV equipment to be moved or added to any convenient modular wall outlet. The CATV Balun II provides a versatile cabling solution for broadband video systems and works in conjunction with RF splitters, combiners, amplifiers and cable modems for a total cabling solution.

Application	Schools, government, offices, hospitals, financial institutions, hotels and residential complexes.
Key Features	High bandwidth - up to 900Mhz
	Compact design
	Eliminate costly coaxial cable
Cat5e/6 Coax	Neater wiring
	Low insertion loss
	Supports broadband Internet and digital cable
	Quicker moves, adds and changes

#### Shielded CATV Balun

Part # 500306, 500306-2PK



The Shielded CATV Balun (500306) allows RG6 coaxial cable to be replaced by Cat 5e/6/7 STP or UTP cable in the terrestrial RF environment. Used in pairs, the Shielded CATV Balun allows broadband CATV equipment to be integrated into a structured cabling system thereby allowing CATV equipment to be moved or added to any convenient modular wall outlet. When used with shielded twisted pair cable, the connection supports greater RF ampliflication and therefore greater distance with less EMI/RFI egress versus the CATV Balun II (500302).

Application	Schools, government, offices, hospitals, financial institutions, hotels and residential complexes.
Key Features	Bandwidth up to 900Mhz including Internet, digital cable
	Lower EMI /RFI egress when STP is used
Cat5e/6 Coax	Low insertion loss
Cat5e/6 Coax	Supports Cat5e/6/7 STP and UTP
	Fits side-by-side on most RF splitters
	Cast aluminum enclosure for maximum EMI/RFI shielding

#### **CATV Hub**



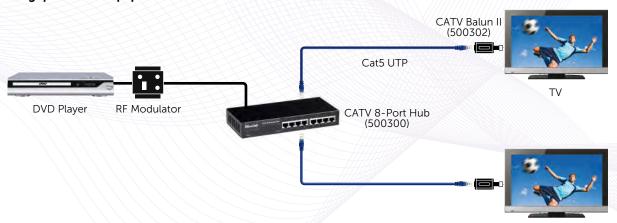
The CATV Hub allows a terrestrial broadband RF video signal to be distributed to multiple RF receivers via Cat5e/6 UTP cable. The CATV Hub is available in two (2) configurations;

**Eight (8) ports:** 500300/500301 **Sixteen (16) ports:** 500303/500304

The CATV Hub works in conjunction with MuxLab's passive CATV Balun (500302) and other RF video equipment for a more complete cabling solution. The CATV Hub has a 900MHz bandwidth and supports broadband video, broadband Internet and Digital Cable. The product features built-in gain amplification and port buffering and may be used in conjunction with standard RF distribution equipment for larger installations.

Application	Residential, apartment, condominiums, hotels, offices, schools, hospitals, airports, trading floors.
Key Features	900MHz bandwidth
	Bi-directional transmission
Cat5e/6 Coax	Compact design
	Cost savings - eliminate costly coaxial cable
	Neater wiring
	Built-in RF amplifier
	Works with other standard RF video equipment
	Centralized cabling for greater control
	Quicker moves, adds and changes

## Typical Application 500300, 500302



# Accessories

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	Part # 500900
· · · · · · · · · · · · · · · · · · ·	Rackmount Balun Chassis 16
Manda Talanta and a second a second and a second and a second and a second and a second a second and a second a second and	Part # 500902
and the second s	Rackmount Balun Chassis 6
	Part # 500905
Plants Saint	3 Port Rackmount Transceiver Chassis
	Part # 500910
	Surface Mount Balun Plate
Morkob	Part # 500915
2 2 0000	Wall Mount Balun Fixture
	Part # 500916
	Surface Mount Transceiver Plate
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	Multimode SFP Module, 850m
A STATE OF THE STA	Part # 500970-SM10
	Singlemode 10Km SFP Module, 1310m
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