

YOUR #1 CHOICE FOR BROADCAST CONNECTIVITY SOLUTIONS



Broadcast

CONNECTIVITY SOLUTIONS

MuxLab's mission



uxlab is a leading designer and manufacturer of connectivity and distribution solutions for commercial and residential installations of all sizes. Though specializing in the professional AV and broadcast markets, Muxlab products have been implemented in countless, high quality AV installations in every major market around the world. Since its inception in 1984, the company continues to be a forerunner of technological advances in signal distribution and connectivity.

While keeping up with emerging technologies, Mux-Lab's mission has remained the same: provide easy to use and affordable solutions that deliver all forms of audio/video anywhere. With a deep understanding of the customer's need for quality, performance and reliability, the company designs and engineers its products in Canada with this focus in mind.

MuxLab's extensive, flagship line of AV over IP solutions cover all major compression technologies including H.264 /H.265, MPEG and JPG2000, as well as uncompressed signal delivery up to 4K/60 resolution and many audio options, offering solutions for HDMI, DVI, DisplayPort, SDI, KVM and audio applications.

Established in 1984

MuxLab strives to partner with customers around the world to empower AV installations, and provide a flawless transmission of AV anywhere, anytime.

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.





Table of contents

Product	Page	
		_
6G-SDI Extenders	4	
12G / 3G / HD-SDI Baluns & Extenders	8	
SDI over IP Extended Distribution	15	
Control of MuxLab IP Products	16	
Splitters	18	
Test Equipment	19	
KVM / Extenders	21	
DisplayPort	26	
CATV & RF Distribution Baluns & Hubs	28	
MuxLab Accessories	30	
Product Reference Guide	31	



6G-SDI Extenders

6G-SDI Extender Kit over UTP

Part # 500730

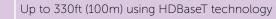


The 6G-SDI Extender over UTP is a unique new solution from MuxLab for extending SDI cameras or other SDI sources up to 4K @ 30Hz resolution with the added benefit of extending the Hi-Resolution signal up to 330ft (100m) using HDBaseT technology. Standard Cat5e/6 UTP cable is used for the extension. The 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



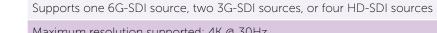














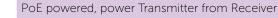
Supported modes: SMPTE 292M, SMPTE 296M, SMPTE 372M, SMPTE 424M, SMPTE 425M, SMPTE ST-2081

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

Automatic SDI Link recognition and configuration

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

USB interface for field upgradable firmware and diagnostics



Ethercon Connectivity for ruggedized usage

3/8"-20 mounting holes

6G-SDI Extender over Fiber Optic Part # 500732



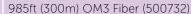


The 6G-SDI Extender over Fiber Optic is a unique solution from Muxlab for extending SDI based cameras or other SDI sources up to 4K @ 30Hz resolution. The 6G-SDI Extender can extend four (4) HD-SDI sources, two (2) 3G-SDI sources, or one (1) 6G-SDI source.

Application

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

Key Features



1,310ft (400m) OM4 Fiber (500732)









130,00ft (10km) Singlemode fiber (500732-SM10)

132,000ft (40km) Singlemode Fiber (500732-SM40)

264,000ft (80km) Singlemode Fiber (500732-SM80)

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

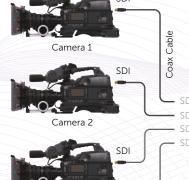
USB interface for field upgradable firmware and diagnostics

Ethercon Connectivity and Aluminum Enclosure for ruggedized use



Supports RS232 over Fiber Optic

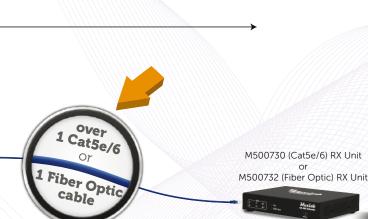
HDMI port on receiver unit (display side)













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,

Key Features









Extend up to 4K @ 30Hz to 330ft (100m) over Cat5e/6

Multichannel support for one 6G-SDI source, two 3G-SDI sources, or four **HD-SDI** sources

Transmits two Ethernet signals which may be used as a return channel for AV monitoring and talk-back

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



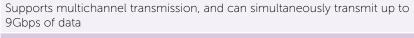












Accepts mixed signal transmission up to one 6G-SDI signal + one 3G-SDI, or two 3G-SDI signals + two HD-SDI signals, and many other combinations in any direction, including the return channels

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)

12G / 3G / 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
	Up to 150ft (45m) via Cat5e/6 cable @ HD (720p/1080i)
Cat5e/6 HD	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-topoint 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
GEDI Cat5e/6	Up to 400ft (122m) via Cat6 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: 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.

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: 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)

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

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	LED diagnostics: Power, Sync detect

Includes Hirose power cable Includes hard plastic carry case

6G-SDI Fiber Extender Kit

Part # 500712



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.

Video production & Broadcasting, Studio-to-studio & Post production, Outside **Application** 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







Supports up to 4K/30 video

Extend transmission up to 60,000ft (20km) over singlemode fiber

LED diagnostics: Power, Sync detect

12G-SDI Fiber Extender Kit

Part # 500713



The 12G-SDI Fiber Extender Kit allows SDI signals up to 12G-SDI to be transmitted up to 6.6mi (10km) via a one singlemode fiber cable in a point-topoint configuration at all specified bit rates. The 12G-SDI Fiber Extender Kit supports transmission of up to 12.0Gbps 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, 12G/6G/3G/HD-SDI routing, 12G/6G/3G/HD-SDI CCTV

Key Features Supports 12G/6G/3G/HD-SDI signals











Extend transmission up to 6.6mi (10km) over singlemode fiber



LED diagnostics

Supports up to 4K/60 video

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





View SDI source video on a lower cost HDMI display

Supports up to 1080p

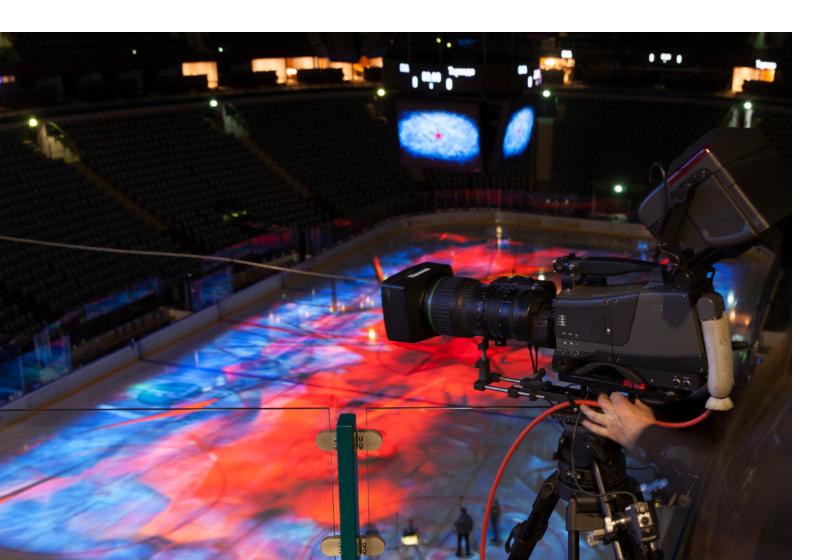
3G-SDI up to 300ft (90m) via RG59 coax

Low jitter & re-clocked output

Supports daisy chain

Wall mountable

LED diagnostics



3G-SDI/ST2110 over IP **Uncompressed Gateway Converter** Part # 500767



The 3G-SDI/ST2110 over IP Uncompressed Gateway Converter allows HD-SDI and 3G-SDI equipment to be extended up to 100ft (30m) via UTP Cat 6a/7 cable or up to 1300ft (400m) via duplex multimode OM4 fiber with LC connectors, at up to 1080p resolution@60Hz uncompressed, in a point-to-point configuration. Point-to-multipoint and multipointto-multipoint configurations are also possible by connecting several units to a 10G Ethernet network. The unit provides a 1G Ethernet Switch port to connect additional network devices, and an RS232 port for remote control of end devices.

Application

Commercial broadcast AV systems, News/sports/TV stations, Movie networks

Key Features

Transmit Uncompressed SDI video up to 3G-SDI (1080p @ 60Hz) over a 10G Ethernet network







Supports the SMPTE ST-2110 protocol

Extend up to 100ft (30m) over Cat 6a/7 or 1300ft (400m) over OM4 fiber

Supports a 1G Switch port for additional network devices

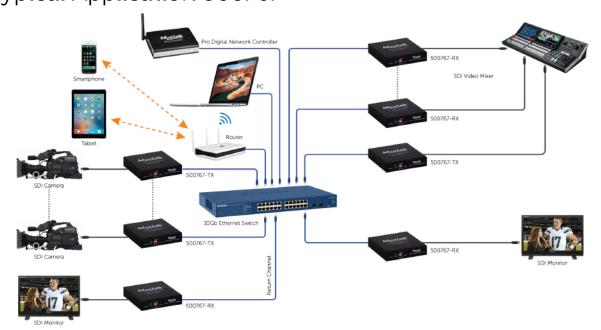
Supports RS232 for remote control of end devices

Managed through its web interface and RestAPI

Available models:

500767-TX-UTP SDI over IP Uncompressed Extender TX, UTP 500767-RX-UTP SDI over IP Uncompressed Extender RX, UTP 500767-TX-MMF SDI over IP Uncompressed Extender TX, MMF 500767-RX-MMF SDI over IP Uncompressed Extender RX, MMF

Typical Application 500767



12G-SDI/ST2110 over IP **Uncompressed Gateway Converter** Part # 500775



The 12G-SDI/ST2110 over IP Uncompressed Gateway Converter allows lower cost 12G-SDI equipment to utilized in a broadcast environment and extended up to 1300ft (400m) via duplex multimode OM4 fiber with LC connectors, at up to 4K resolution @ 60Hz uncompressed, in a point-to-point configuration.

Key Features

Supports Uncompressed SDI video up to 12G-SDI (4K @ 60Hz) and SMPTE ST-2110







Extend SDI over an IP network at up to 1300ft (400m) over duplex OM4 fiber

Supports two 10G Ethernet ports for communications and a 1G Switch port for additional network devices

Supports audio insert (TX) & audio extract (RX)

Supports RS232 for remote control of end devices

Managed through its Web interface and RestAPI

HDMI 2.0/ST2110 over IP **Uncompressed Gateway Converter** Part # 500774



The HDMI 2.0/ST2110 over IP Uncompressed Gateway Converter allows lower cost HDMI 2.0 equipment to utilized in a broadcast environment and extended up to 1300ft (400m) via duplex multimode OM4 fiber with LC connectors, at up to 4K resolution @ 60Hz uncompressed, in a point to-point configuration. Point-to-multipoint and multipoint-to-multipoint configurations are also possible by connecting several units to a 10G Ethernet network. The unit provides a 1G Ethernet Switch port to connect additional network devices, and an RS232 port for remote control of end devices.

Application

Video production, commercial broadcast AV systems, news/sports/TV stations, and movie networks/studios, post-production and live events

Key Features

Supports Uncompressed HDMI video up to 4K @ 60Hz and SMPTE ST-2110





Supports two 10G Ethernet ports for communications and a 1G Switch port for additional network devices



14

Supports audio insert (TX) & audio extract (RX)

Supports RS232 for remote control of end devices

Managed through its Web interface and RestAPI

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









Supports up to 1080p resolutions 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)

Dante/Quad Channel Audio PoE Gateway

Part # 500765



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 singlechannel 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.

Key Features









Interface analog audio equipment to Dante audio equipment

Supports Quad single-channel full range balanced analog audio from 20Hz to 20KHz

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

Supports Quad single-channel balanced analog audio-in and Quad singlechannel 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

ProDigital Network Controller

The Brain Behind the MuxLab AV over IP System



The MuxLab ProDigital Network Controller is a Linux-based PC that allows users to control hub-installed MuxLab products via an Ethernet Web interface.

When installed on a local area network (LAN), the MuxLab Network Controller will scan the LAN for connected MuxLab products allowing the user to configure and control these products through an Ethernet Web interface.

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

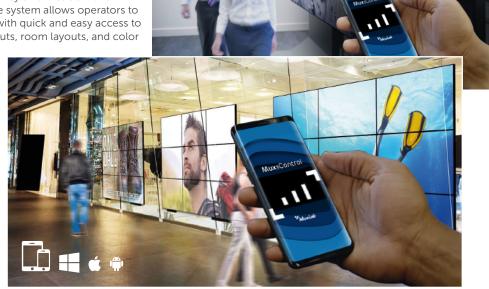




MuxLab Control is a software control application designed to manage MuxLab AV over IP devices via Android and Apple smartphones and tablets. MuxLab Control supports an intuitive easy to operate GUI that simplifies management of any size AV over IP installation, be they small residential or large commercial applications. The system allows operators to centrally manage many locations with quick and easy access to any site, supporting floor plan layouts, room layouts, and color

coded indicators for connected source and display equipment for easy identification, allowing for intuitive connectivity management at the touch of a finger. Managing large AV over IP based matrices and video walls, is a breeze.

MuxLab Control has been designed to be exceptionally easy to configure and operate. The application is interoperable with the MuxLab ProDigital Network Controller (500811) to manage the entire MuxLab AV over IP product family.



HDMI 2.0 Digital Signage Media Player

Part# 500769

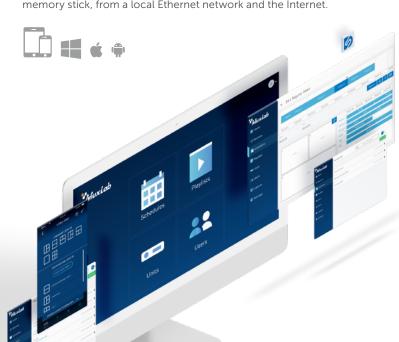


Accepts multiple H.264/H.265 content streams simultaneously at resolutions up to 4K/60 (4:4:4) from a local network, the Internet, internal memory drive or external USB memory devices. It supports multi-view windows and scheduling to automatically deliver customized content based on a weekly schedule. Multiple video, audio and image file formats are supported.

It is able to up-scale 1080p@60Hz video to 4K@60Hz (4:4:4) and delivers content to a display or to another transmitter to support virtual matrix and video wall configurations. The exceptionally low bandwidth requirements of this device allows it to accept streaming content over a local network, over Wi-Fi, and over the Internet for distributed installations spread throughout the globe.

DigiSign Content Management Software for Windows, iOS & Android

The DigiSign software works with our Digital Signage Media Player and allows users to create, manage and control AV from a variety of sources, including content streaming via an H.264/H.265 codec over a local Ethernet network, Internet, internal memory and external USB 3.0 memory devices. It was designed for an exceptional user experience, is simple to use and allows the user to gather, organize and schedule content. Content can be autonomously scheduled for the week, with additional weeks ready to automatically play, offering a "set and forget" functionality. Users can create multi-view window layouts and assign audio, video and images, including text banners and logos, to each. Content can play simultaneously from multiple sources, including its internal memory, a USB memory stick, from a local Ethernet network and the Internet.





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

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 & Displays

HDMI 2.0 3G-SDI Signal Generator Part # 500830



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 33 preset patterns & 32 preset resolutions

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

3" LCD panel for pattern preview & menu settings

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

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 # 500<u>83</u>1



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

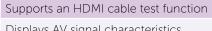
Key Features











Displays AV signal characteristics

3" LCD panel for pattern preview & menu settings

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

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

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 18

HDMI/3G-SDI Triple Display

Part # 500840



The HDMI/3G-SDI Triple Display supports three independent 5 inch TFT LCD displays mounted conveniently and securely on a 2RU 19" rack. These devices save a significant amount of space in multidisplay Pro AV and Broadcast applications. The unit supports input and loop-out of HDMI signals up to 1080p/60, SDI signals up to 3G-SDI, and CVBS signals with Audio. The unit supports a tri-color Tally light indicator per display, customizable buttons allowing customers to tailor them to their needs, and advanced functions such as Center Marker, Safe Frames, Check Field, Focus Assist, Aspect Ratio, Image Flip, P2P, and Image Freeze.

Key Features

Triple 5-inch TFT LCD displays







Supports HDMI (1080p), 3G-SDI and CVBS with Audio

Fits 19-inch rackmount @ 2 RU

Tri-color Tally light indicator per display

Supports Center Marker, Safe Frames, Check Field, Focus Assist, Aspect Ratio, Image Flip, P2P & Image Freeze

Customizable buttons tailored to customer needs

Supports firmware update via mini USB

HDMI/VGA/USB over IP PoE Wall Plate Transmitter, UHD-4K

Part # 500777



The HDMI/VGA/USB over IP PoE Wall Plate Transmitter allows HDMI, VGA and USB equipment to be connected up to 330ft (100m), with video supported at up to 4K (3840x2160) resolution @ 30Hz via one CAT5e/6 unshielded twisted pair cable in a point-to-point configuration. Point-to-multipoint and multipoint-to-multipoint configurations are also possible by connecting several Transmitters and Receivers to the same local Ethernet IP network via an Ethernet Switch.

Key Features

HDMI 2.0b up to 4K @ 30Hz (4:4:4) and 4K @ 60Hz (4:2:0)



20









VGA 1920x1200 @ 60Hz, with 2CH Audio-In

Selectable HDMI / VGA with Audio inputs, with auto switching capability

Remotely managed over IP & locally managed via push button

Extend HDMI, VGA with 2CH Audio, and USB 2.0 up to 330ft (100m) over Cat5e/6 cable

HDCP 2.2 compliant

Compatible with 500758-RX and 500759-RX over IP Receivers

PoE powered

Managed via Pro Digital Network Controller (500811), MuxLabControl Smartphone & Tablet App & 3rd Party Control Apps

KVM / Extenders

KVM HDMI over IP PoE Extender Kit KVM DVI over IP PoE Extender Kit

Part # 500770/500771





The KVM HDMI over IP PoE Extender Kit or KVM DVI over IP PoE Extender Kit allows HDMI or 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 an HDMI or DVI & USB port, and each Receiver terminates to an HDMI or 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 HDMI or DVI up to 1920x1200 and 1080p @ 60Hz

Receiver side includes a 4-port USB hub, for KVM applications













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



Supports audio insert & mic-out (TX), and audio extract & mic-in (RX)

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

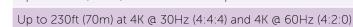
Up to 330 ft (100m) at all resolutions up to 1920x1200 via one Cat5e/6











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

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









4-port USB 2.0 hub at Receiver

Supports IR transmission for remote control

Uncompressed signals

USB 2.0 (250Mbps max)

USB2.0 4-Port Extender Kit

Part # 500072



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



DVI/Audio Extender Kit

Part # 500390



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











HDBaseT technology

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

DVI Fiber Optic Extender Kit

Part # 500463

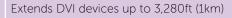


Extend DVI over one multimode fiber optic cable up to 3,280ft (1km). The MuxLab DVI Fiber Optic Extender Kit lengthens your DVI display from your video source using a single strand of multimode fiber optic cable. Automatic EDID programming enables simple synchronization of the video source to the display.

Key Features







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: SC

Power 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 µm 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 µm 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

Part # 500465, 500465-RX



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
₽ P 'AK	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 (3840x22400) 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
Display Port Litina HD Fiber Optic	Supports the DisplayPort 1.2a standard
	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
USTRA 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.

27

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
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 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
Cat5e/6 Coax	Compact design
	Eliminate costly coaxial cable
	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
	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

Part # 500300, 500301 500303, 500304



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

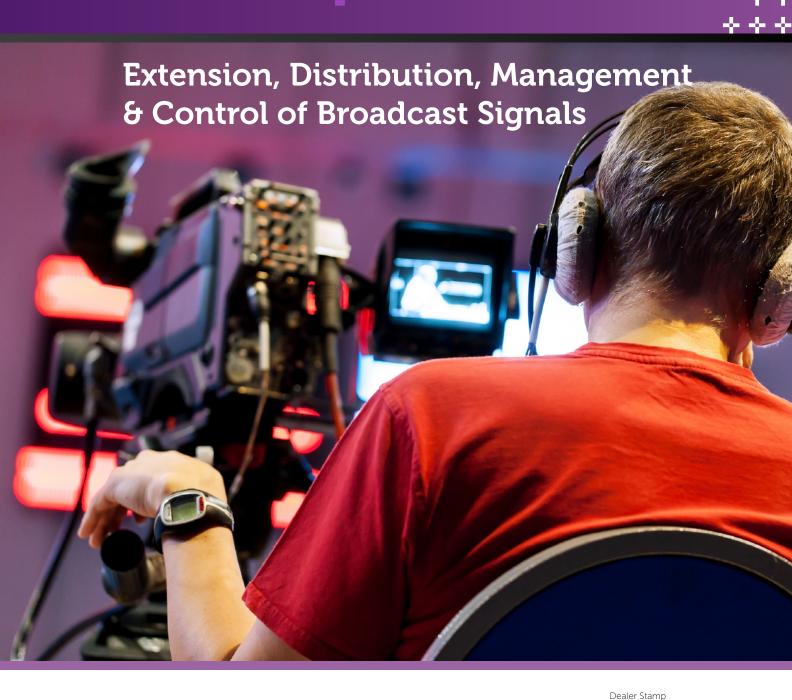


Accessories

, think and the state of the st	Part # 500902
	Rackmount Balun Chassis 6
Panal Marian	Part # 500905
	3 Port Rackmount Transceiver Chassis
	Part # 500917
	Wall Mount Transceiver Bracket Kit
	Part # 500920
	16 Port Rackmount Transceiver Chassis
•	Part # 500921
	Blank Filler Plates (4) for 500920
	Part # 500922
	Spare Brackets (4) for 500920
	Part # 500970-MM
	Multimode SFP Module, 850m
	Part # 500970-SM10
	Singlemode 10Km SFP Module, 1310m
	Part # 500970-SM40
	Singlemode 40Km SFP Module, 1550m
	Part # 500970-SM80
	Singlemode 80Km SFP Modile, 1550nm
	Part # 500998
	IR Emitter
	Part # 500999
	IR Sensor

BROADCAST PART NUMBER Reference Guide

Part #	Description	Page
500072	USB2.0 4-PORT EXTENDER KIT	22
500300 / 500301 /	CATV HUB	29
500303 / 500304		
500302, 500302-2PK	CATV BALUN II	28
500306, 500306-2PK	SHIELDED CATV BALUN	28
500390	DVI/AUDIO EXTENDER KIT	23
500391	DVI / USB2.0 HDBASET EXTENDER KIT	21
500457	HDMI/USB2.0 EXTENDER KIT	22
500463	DVI FIBER OPTIC EXTENDER KIT	24
500501	DISPLAYPORT TO HDMI ACTIVE ADAPTER	26
500502	DISPLAYPORT 1.2A FIBER EXTENDER KIT	26
500505	DISPLAYPORT 1.2A 1X2 SPLITTER, SST	27
500506	DISPLAYPORT 1.2A 1X2 HUB, MST	27
500700	3G-SDI EXTENDER KIT	8
500701, 500701-2PK	HD-SDI BALUN	8
500702	LONGREACH™ 3G-SDI EXTENDER KIT	9
500710	3G-SDI FIBER EXTENDER KIT	10
500712	6G-SDI FIBER EXTENDER KIT	11
500713	12G-SDI FIBER EXTENDER KIT	11
500715	3G-SDI TO HDMI EXTENDER KIT	9
500716	LONGREACH™ 3G-SDITO HDMI EXTENDER KIT	10
500717	3G-SDI TO HDMI EXTENDER KIT	12
500718	12G-SDI 1×6 SPLITTER, 4K60	18
500719	3G-SDI 1×4 SPLITTER	18
500730	6G-SDI EXTENDER KIT OVER UTP	4
500732	6G-SDI EXTENDER OVER FIBER OPTIC - 1,300FT (400M)	5
500732-SM10	6G-SDI EXTENDER OVER FIBER OPTIC - 33,000FT (10KM)	5
500732-SM40	6G-SDI EXTENDER OVER FIBER OPTIC - 132,000FT (40KM)	5
500732-SM40	6G-SDI EXTENDER OVER FIBER OPTIC - 264,000FT (80KM)	5
500733	6G-SDI EXTENDER OVER UTP WITH ETHERNET	6
500734	6G-SDI EXTENDER OVER FIBER OPTIC WITH RETURN CHANNEL	7
500734-SM10	6G-SDI EXTENDER OVER FIBER OPTIC WITH RETURN CHANNEL - 33,000FT (10	
500734-SM40	6G-SDI EXTENDER OVER FIBER OPTIC WITH RETURN CHANNEL - 132,000FT (4 6G-SDI EXTENDER OVER FIBER OPTIC WITH RETURN CHANNEL - 264,000FT (8	
500734-SM40 500756	THE 3G-SDI / RS232 OVER IP EXTENDER KIT WITH POE	15
500765	DANTE/QUAD CHANNEL AUDIO POE GATEWAY	15 15
500767	SDI OVER IP 4K UNCOMPRESSED EXTENDER	13
500770	KVM HDMI OVER IP POE EXTENDER KIT	21
500770	KVM DVI OVER IP POE EXTENDER KIT	21
500774	HDMI 2.0 / ST2110 OVER IP UNCOMPRESSED EXTENDER	14
500775	12G-SDI / ST2110 OVER IP UNCOMPRESSED EXTENDER	14
500811	PRO DIGITAL NETWORK CONTROLLER	17
500830	HDMI 2.0/3G-SDI SIGNAL GENERATOR	19
500840	HDMI/3G-SDI TRIPLE DISPLAY	20
500831	HDMI 2.0/3G-SDI SIGNAL ANALYZER	19
500902	RACKMOUNT BALUN CHASSIS 6	30
500905	3 PORT RACKMOUNT TRANSCEIVER CHASSIS	30
500917	WALL MOUNT BALUN FIXTURE	30
500920	16 PORT RACKMOUNT TRANSCEIVER CHASSIS	30
500921	BLANK FILLER PLATES (4) FOR 500920	30
500922	SPARE BRACKETS (4) FOR 500920	30
500970-MM	MULTIMODE SFP MODULE, 850M	30
500970-SM10	SINGLEMODE 10KM SFP MODULE, 1310M	30
500970-SM40	SINGLEMODE 40KM SFP MODULE, 1550M	30
500970-SM80	SINGLEMODE 80KM SFP MODILE, 1550NM	30
F00000	IR EMITTER	30
500998 500999	IR SENSOR	30





MuxLab Inc.

2321 Rue Cohen, Montreal, Quebec, Canada, H4R 2N7 Tel: (514) 905-0588 Fax: (514) 905-0589 Toll Free: 1-877-689 5228 E-mail: info@muxlab.com







