

# Velocitykvm

KVM Extension System - 8  
One Dual-Link DVI Display

Powered by  
MRTS Technology

- Supports one Dual-Link DVI signal with maximum resolution of 3840 x 2400
- MRTS technology 6.25Gbps allows for full frame rate transmission of uncompressed DVI
- Supports USB HID, USB 1.1 and USB 2.0 devices
- Local KVM connections on the transmitter
- DDC2B/EDID compliant
- Flawless image quality with no frame dropping



Velocitykvm System - 8, Transmitter and Receiver, Multi-Mode Fiber

## The Logical Solution - KVM Extension

The Velocitykvm System - 8 is designed to support **one Dual-Link DVI display**, PS2, full duplex stereo audio, serial (RS-232), USB 1.0 (HID), USB 1.1, and USB 2.0 (up to 480 Mbps) device ports. Using multi-mode or single mode fiber, the system allows users to locate a DVI monitor and peripherals via fiber from just a few meters up to 10 kilometers away from the controlling computer securely without the loss of resolution.

Powered by Thinklogical's cutting edge, patent-pending MRTS (Multi Rate Transmission System) technology, this extension system transports every frame of a DVI video stream seamlessly, with no compression, or dropped frames. In addition, all high speed peripherals function with no latency making it ideally suited for a wide range of applications in the broadcast and post-production field, as well as command and control centers, universities, large scale digital signage, and any other commercial KVM applications.

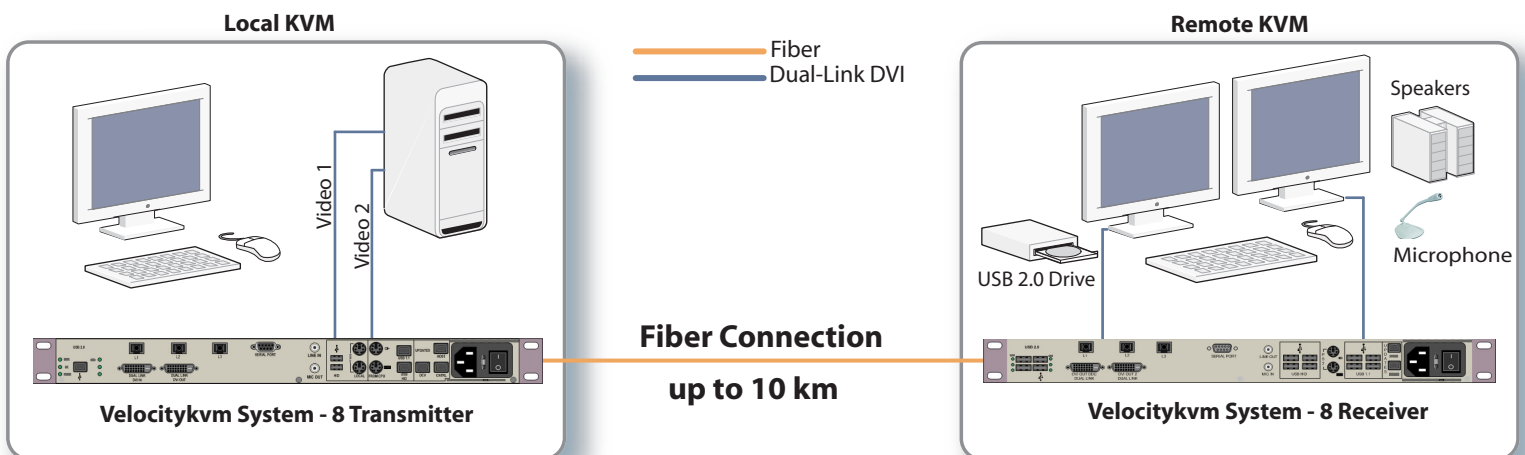
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## The System

The Velocitykvm System - 8 has a simple transmitter/receiver design which allows for ease of installation and straight forward deployment. Depending on the user's infrastructure, the transmitter and the receiver can be connected by multi-mode or single-mode fiber optic cable. The transmitter unit connects to the CPU with the supplied peripheral cables. In addition, a local video, keyboard, and mouse ports are on the transmitter. The receiver unit provides connections to the user interface devices.

Leveraging standard SFP+ transceivers, the system allows for the usage of either multi-mode or single-mode fiber optic cable. The Velocitykvm Extender - 8 requires three fibers for a Dual-Link multi-mode configuration. Two fibers are dedicated to the video and USB while the third fiber is the back channel for the USB and DDC. The DDC (Display Data Channel) or EDID (Extended Display Identification Data) information is provided to the CPU by either a generic table stored inside the transmitter, or from a display connected to the transmitters local port. Also, the added capability of active DDC allows the remote monitor to send its display capabilities to the CPU. Multi-mode models are available with SC, ST, or LC type fiber connectors.

The Velocitykvm System - 8 is also offered in a single-mode option. Standard fiber count is three, however models with fewer fibers are available. For single-mode models we recommend SC/APC (Angle Polished Connector) for optimum performance.



Typical application extending DVI video and peripheral devices using the Velocitykvm System - 8

## Key Features

- Supports one Dual-Link DVI signal with maximum resolution of 3840 x 2400
- MRTS technology 6.25Gbps allows for full frame rate transmission of uncompressed DVI
- Requires one, two or three fiber optic cables depending on application
- Flawless image quality with no frame dropping
- Extends signals up to:
  - 750 meters using SX+ multi-mode fiber
  - 1000 meters using eSX+ multi-mode fiber
  - 10 kilometers using single mode fiber
- Local KVM connections on the transmitter
- Two video outputs on the receiver
- USB HID, USB 1.1 and USB 2.0 compliant - High Speed 480 Mbps., 4-port hub
- Full keyboard and mouse emulation through the transmitter, full duplex stereo audio, serial RS-232
- DDC2B/EDID compliant
- Simple plug and play
- Fully compatible with Thinklogical's KVM VXRouter line of products



Velocitykvm Extender - 8 Transmitter, Multi-Mode



Velocitykvm Extender - 8 Receiver, Multi-Mode

## Velocitykvm Extenders - 8 Transmitter and Receiver Back Views

## Specifications

<b>Video Resolution</b>	Dual-Link DVI 3840 x 2400
<b>Operating Temp.</b>	0°-50°C; (32°-122°F)
<b>Humidity</b>	5-95% RH, non-condensing
<b>Dimensions</b>	Rack Size: EIA 19" Height: 1U-1.72" (4.40 cm) Depth: 18.02" (45.8 cm) Width: 17.49" (44.5 cm) (Tolerance: ± .039"; .100cm)
<b>Weights</b>	Weight: 11 lbs (4.99 kg) per unit Shipping Weight: 27 lbs (12.25 kg) pair
<b>Power Consumption</b>	40 watts per unit
<b>Supply Voltage</b>	100-240 VAC, 47-63 Hz, Universal AC Power Supply
<b>Optical Cable</b>	Single Mode and Multi-Mode over Three Fibers (for fewer fiber counts contact Thinklogical) Fiber is Available, Not Supplied
<b>Optical Distance</b>	Up to 50 meters using 50/125um, type OM1; Up to 350 meters using 50/125um, type OM2 Up to 750 meters using 50/125um, type OM3 enhanced; Up to 1000 meters using 50/125um, type OM3 enhanced Up to 10 kilometers using 9/125um, type OS2 (Single-Mode) (Please contact Thinklogical for distances over 10 kilometers)
<b>Compliance</b>	Approvals for US, Canada, and European Union
<b>Warranty</b>	12 months from date of shipment - Extended warranties available

## Copper Connectors

Transmitter		Receiver	
Video	DVI-D (2)	Video	DVI-D (2)
Audio MIC	3.5mm Jack	Audio MIC	3.5mm Jack
Audio LINE	3.5mm Jack	Audio LINE	3.5mm Jack
Serial Port	DB9 Female	Serial Port	DB9 Male
USB 1.0 (HID)	USB B	USB 1.0 (HID)	USB A (4)
USB 1.1	USB B	USB 1.1	USB A (4)
USB 2.0	USB B	USB 2.0	USB A (4)
USB Local Keyboard	USB A	PS2 Keyboard	MiniDIN 6 Female
USB Local Mouse	USB A	PS2 Mouse	MiniDIN 6 Female
PS2 Keyboard	MiniDIN 6 Female	Software Updates	USB B (2)
PS2 Mouse	MiniDIN 6 Female	Fiber Connectors	SC/APC for Single Mode LC, SC or ST for Multi-Mode
PS2 Local Keyboard	MiniDIN 6 Female		
PS2 Local Mouse	MiniDIN 6 Female		
Software Updates	USB B (3)		
Fiber Connectors	SC/APC for Single Mode LC, SC or ST for Multi-Mode		

**Cables Included:** DVI-D Dual-Link male to male, 2 meter  
USB A to USB B cable, 6 feet

**Cables Included:** USB A to USB B cable, 6 feet

## Velocitykvm System - 8 Ordering Information

### VELOCITY 8: SINGLE-MODE

#### Part Number and Description

VEL-U00S08-SCRX	Velocitykvm System Receiver, Single Head Dual Link DVI, USB 2.0, KMAS, Single Mode, SC/APC
VEL-U00S08-SCTX	Velocitykvm System Transmitter, Single Head Dual Link DVI, USB 2.0, KMAS, Single Mode, SC/APC

#### VELOCITY EXTENDER OPTICS OPTION for SINGLE-MODE

VOP-S08	Velocitykvm Optics Option for Transmitter or Receiver, Single Mode, Three Fibers, 10KM, SC/APC
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### VELOCITY 8: MULTI-MODE

#### Part Number and Description

VEL-U00M08-LCRX	Velocitykvm System Receiver, Single Head Dual Link DVI, USB 2.0, KMAS, Multi-Mode, LC
VEL-U00M08-LCTX	Velocitykvm System Transmitter, Single Head Dual Link DVI, USB 2.0, KMAS, Multi-Mode, LC
VEL-U00M08-SCRX	Velocitykvm System Receiver, Single Head Dual Link DVI, USB 2.0, KMAS, Multi-Mode, SC
VEL-U00M08-SCTX	Velocitykvm System Transmitter, Single Head Dual Link DVI, USB 2.0, KMAS, Multi-Mode, SC
VEL-U00M08-STRX	Velocitykvm System Receiver, Single Head Dual Link DVI, USB 2.0, KMAS, Multi-Mode, ST
VEL-U00M08-STTX	Velocitykvm System Transmitter, Single Head Dual Link DVI, USB 2.0, KMAS, Multi-Mode, ST

#### VELOCITY EXTENDER OPTICS OPTION for MULTI-MODE

VOP-M05	Velocitykvm Optics Option for Transmitter or Receiver, Multi-Mode, Three Fibers, LC
VOP-M02	Velocitykvm Optics Option for Receiver, Multi-Mode, Three Fibers, SC or ST

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