

RIVO MULTITRADE OPTICAL SYSTEMS

Fiber optic network KVM



Overview

Using fiber optics for KVM extension. If you're sending KVM signals between buildings for an extended distance, in areas supplied by different power source.

Key Takeaways

Fiber optic KVM extenders allow remote control of computers or servers over long distances with high-resolution video, low latency, and secure signal transmission.

Fiber optic KVM extenders transmit keyboard, video, mouse, USB, audio, and serial signals over optical fiber, enabling users to control computers or servers from remote locations without performance loss. They are ideal for high-security environments, data centers, broadcast studios, medical facilities, and industrial control rooms where long-distance, interference-free connections are required .

Key Features

- **High Resolution Support:** Many fiber KVM extenders support up to 4K resolution at 60Hz or higher, with multi-monitor capabilities for professional applications .
- **Long-Distance Transmission:** Depending on the model, fiber KVM extenders can transmit signals from hundreds of meters up to 70 km over single-mode or multi-mode fiber .
- **Low Latency:** Fiber connections provide zero or near-zero latency, ensuring real-time control for mission-critical applications .

- EMI Immunity: Optical fiber eliminates electromagnetic interference, making these extenders suitable for high-EMI environments such as industrial plants or hospitals .
- Multi-Device Control: Some systems allow matrix switching, enabling multiple users to control multiple computers from a single console .
- Plug-and-Play Setup: Many extenders support easy installation with standard SFP modules and Ethernet switches, often without complex VLAN configuration .

Typical Applications

- Data Centers and Server Rooms: Centralize servers while providing remote access to multiple workstations.
- Broadcast and Media Production: High-resolution video transmission for live events and control rooms.
- Medical and Telemedicine: Remote diagnostics and control of imaging or lab equipment.
- Industrial and Utilities Control: Secure monitoring and operation of critical systems in harsh environments.
- Education and Campus Networks: Remote PC control for labs and lecture halls .

Examples of Fiber KVM Extenders

- Matrox Extio 2 Series: Supports up to quad 2560x1600 @ 60Hz over single or multi-mode fiber, expandable to 16 screens, ideal for multi-monitor workspaces .
- ATEN Fiber KVM Extenders: Extend USB consoles up to 20 km with dual-console operation and touchscreen support .
- Rexton 4K60 HDMI Dual Head Extender: Extends dual 4K60 HDMI, USB, audio, IR, and RS-232 signals up to 20 km over single-mode fiber .
- Black Box KVM Series: DisplayPort KVM extenders over single-mode fiber up to 30 km, with local video support and ready-to-use PC connection cables .

Conclusion

Fiber optic KVM extenders provide secure, high-quality, and long-distance remote access to computers and servers, supporting high-resolution video, multi-monitor setups, and low-latency control. They are essential for environments where performance, reliability, and EMI immunity are critical, and they offer scalable solutions for both point-to-point and matrix configurations.

Article Content

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If you're sending KVM signals between buildings for an extended distance, in areas supplied by different power sources, in an

4K Fiber KVM Extender up to 550m for Remote PC Control

Stream high-definition video for telemedicine and remote diagnostics with the fiber optic KVM extender. Optical

KVM Fiber Optic Extenders over Fiber up to 70 km

The Fiber Extender is designed to extend signals over Optical Fiber for long-distance transmission. Rextron is good at providing a

KVM Fiber Extenders HDMI DisplayPort VGA USB Singlemode

KVM Extenders over Fiber Extend a monitor, keyboard, and mouse away from a computer with no loss of signal using fiber optic

KVM Extenders | Matrox Video

Matrox Extio 3 works as either a point-to-point (fiber optic or copper), or networked KVM extension and switching solution, leveraging

KVM Extender over Fiber

The KVX HDMI/DisplayPort Dual Head KVM Extender lets you control a server or computer over a single-mode or multimode cable

4K HDMI KVM Extender over Fiber

REMOTE ACCESS: USB & 4K HDMI KVM extender over fiber controls a KVM switch/console or PC using a fiber optic cable at

4K KVM Extender over Fiber

This product is a 4K KVM Extender set. It extends 4K video and USB 2.0 signals along long distance with zero latency,

Which type of fiber/optic cable to use for KVM monitor output streaming

So I basically have 2 questions which are related. One is, is there a KVM device that supports either HDMI 2.1 or DP

DisplayPort KVM Extenders Over CAT6 Fiber HDBaseT Remote 4K

DisplayPort KVM Extenders Extend a DisplayPort monitor and USB keyboard & mouse over CATx or fiber optic cable.

Fiber KVM Extender

NTI ST-FOUSBVARS-LC12V VGA USB KVM Extender via One LC Singlemode/Multimode Fiber Optic Cable \$995.00 NEW ADD TO

DisplayPort KVM Extender over Fiber Optic, 4K 60Hz, Console

FIBER OPTIC KVM EXTENDER: Control a KVM switch, console, or PC at a distance of up to 984ft (300m) away over multi-mode

Secure Fiber to the Desktop (FTTD) Solutions | Black Box

Fiber optic cables are the gold standard in networking. Fiber optic networks deliver increased bandwidth with top-notch security

Shop KVM Fiber Extenders | Markertek

The ATEN CE980 USB True 4K DisplayPort/HDMI Optical KVM Extenders ensure transmission of True 4K video, KVM and control

KVM Extenders:Fibre-Optic:

P2P-KVR300 - SmartAVI - Single Head DVI KVM-Over-IP Extender/Matrix Switch, CATx + Fiber, DVI Receiver (P2PKVM Series)

4K HDMI USB KVM Fiber Extender Over IP Singlemode Multimode

Manage transmitter/receiver connections and video wall configuration with web interface or network switch that supports VLAN. Each

Secure High Performance KVM Extenders and Matrix Switches

Thinklogical provides secure, high-performance, fiber-optic KVM extenders and matrix switches that offer uncompressed, high

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