

FXCORE-PRO

Ultra-Secure 8x8 KVM Fiber Optic Matrix



Manage uncompressed signals and secure KVM functions over long distances with OSD command and fiber optic routing.

FEATURES

- Manage secure KVM (keyboard, video and mouse) on 8 PCs with 8 workstations over fiber optics
- Device-to-matrix routing distance of 1,500 feet in multimode, 3,000 feet from device to device
- Device-to-matrix routing distance of 15 miles in singlemode, 30 miles from device-to-device
- Supports uncompressed DVI-D video, stereo audio, and RS-232 control
- Supports On Screen Display (OSD) control and optional broadcasting functionality
- Fiber optic plug type LC

APPLICATIONS

- Government and Defense Operations
- Security Control Centers
- Medical Campuses
- Airports and Air Traffic Control Centers
- Academic Institutions
- Industrial Work Areas
- Sound Stages and Recording Studios
- Information Kiosks and Displays
- Convention Centers
- Sports Arenas and Public Facilities



SECURE, LONG-DISTANCE SIGNAL ROUTING OVER FIBER OPTICS

The FXCore-Pro delivers stunning HD DVI-D video and USB Keyboard-Mouse signals across long distances with the unsurpassed efficiency, flexibility, and security of fiber optic matrix routing. Perfect in environments where confidentiality and speed are essential, the FXCore-Pro offers users palpable results with 1080p resolution video, stereo audio, Keyboard-Mouse command, USB peripheral connectivity, and optional RS-232 support.

Both users and end-point devices can connect to FXCore-Pro from as far as 15 miles away: a whopping 30 miles of high-speed signal connectivity thanks to its advanced fiber optic routing. Performing at near real-time, users can control KVM functions on remote systems, all with the security and uncompressed visual clarity only fiber optic solutions can offer.

The FXCore-Pro matrix also features On Screen Display (OSD), which bolsters security by requiring a login for private access to connected computers. The FXCore-Pro takes signal safety to the next level, letting users label linked devices and assume unparalleled command of their connected signal network.

Highly compatible with all SmartAVI fiber optic solutions, the FXCore-Pro pairs well with fiber extenders and switches for enhanced signal range and functionality. Better yet, FXCore-Pro is plug-and-play, so users can easily integrate the matrix into existing AV set-ups: no additional software required.

SINGLEMODE AND MULTIMODE FIBER OPTICS

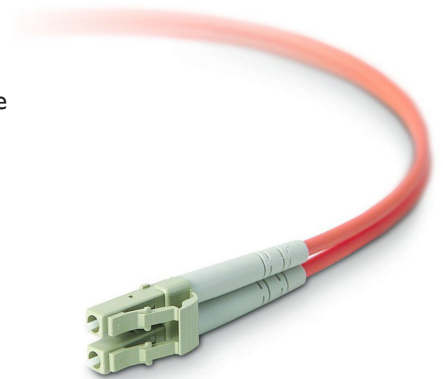
The FXCore-Pro enables users to select either singlemode or multimode fiber optic extension, depending on the requirements of each application.

Singlemode Optical Fiber

By using singlemode optical fiber, the FXCore-Pro can transmit high-quality signals to unprecedented distances. By utilizing just a single ray of light, singlemode transmission are fast and far reaching with an incredible bandwidth capability. Singlemode fiber allows for the safest transmission of signals across vast distances.

Multimode Optical Fiber

By using multimode optical fiber, the FXCore-Pro can transmit more data via more device types, but across a smaller distance. Multi-mode also provides a more cost-effective way to implement the ultra-secure functionality of fiber, particularly when long-distance signal transmission isn't required in a specific locale or building.



WHY USE FIBER OPTICS?



Faster and more secure with higher fidelity than other cables



Carries more data for longer distances



No interference, grounding, or atmospheric constraints

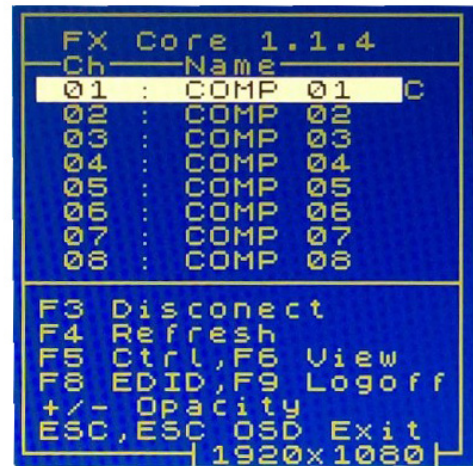


Lower lifetime costs due to high durability

INTUITIVE CONTROL VIA ON SCREEN DISPLAY (OSD)

For fast and secure access to KVM-connected computers, look no further than FXCore-Pro's intuitive OSD (On Screen Display) system. OSD offers secure login for private access to devices connected to the matrix. Once logged in with the OSD, users can view and command connected devices and KVM functions with ease.

Furthermore, FXCore-Pro's OSD simplifies use of the matrix by allowing users to name each linked device, making it easier than ever to quickly connect with the right computer every time. Paired with the proven security of fiber optic technology, the OSD ensures users and system architects have a safe and optimized experience each time they access remote devices via FXCore-Pro.

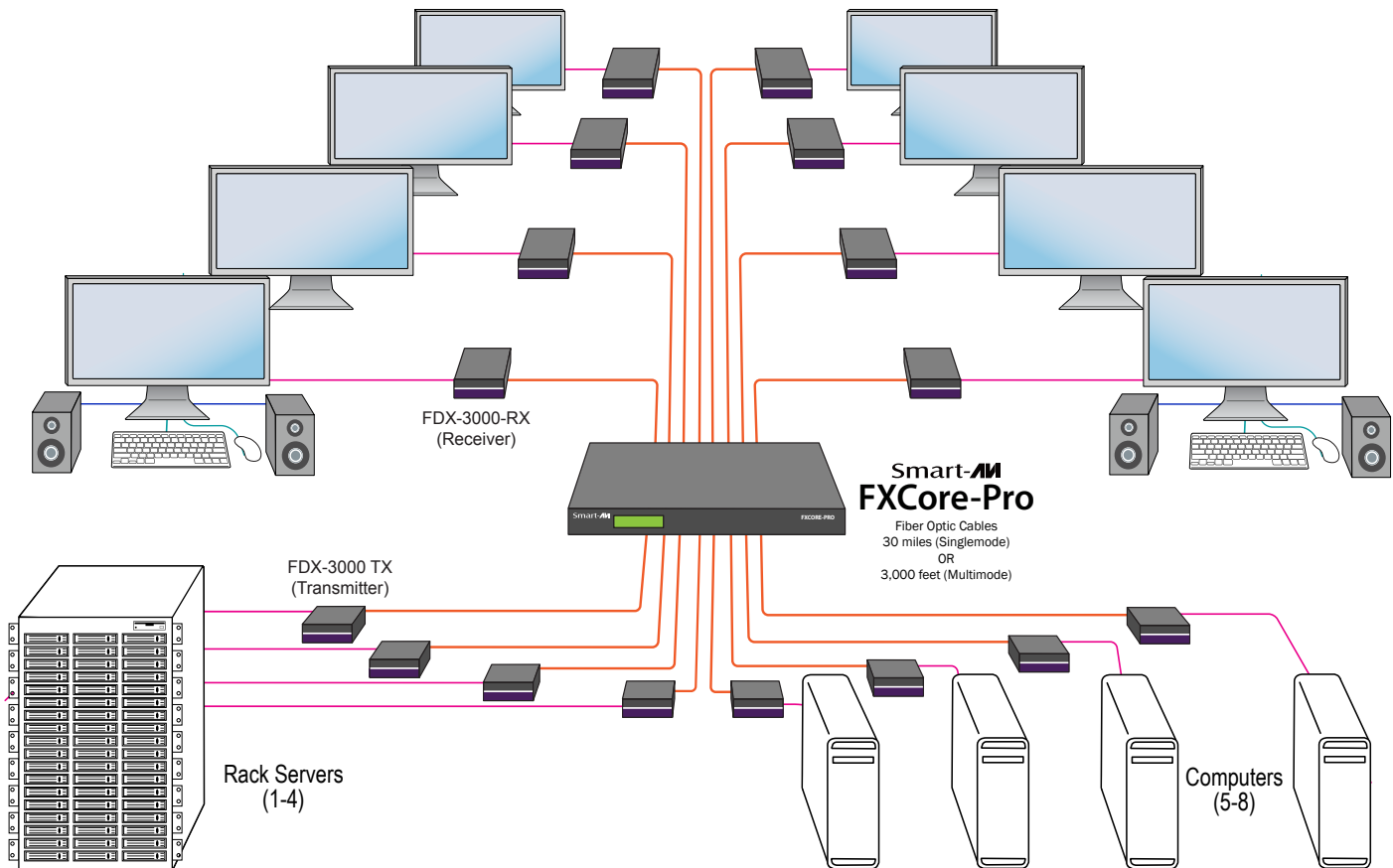


Screenshot of the FXCore-Pro OSD

APPLICATION DIAGRAM

MULTI-DEVICE USAGE

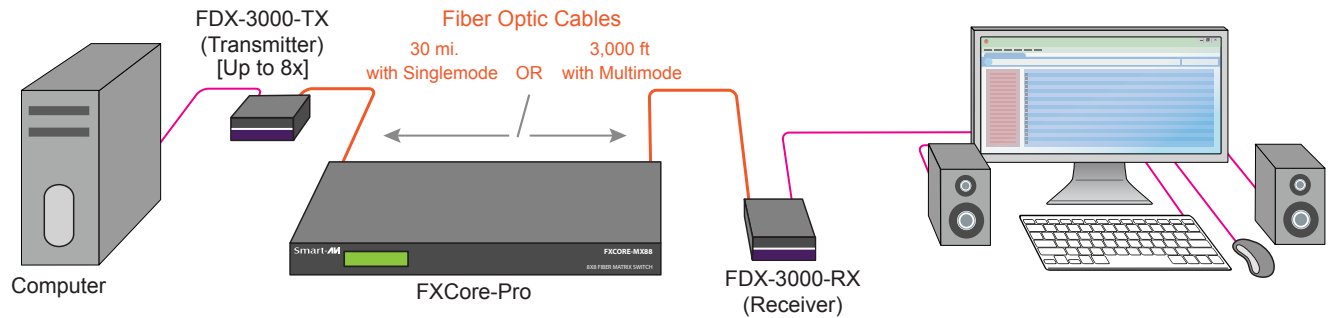
Utilizing Full 8x8 Functionality with the FXCore-Pro and the FDX-3000



REAL-WORLD APPLICATIONS

Educational Facilities

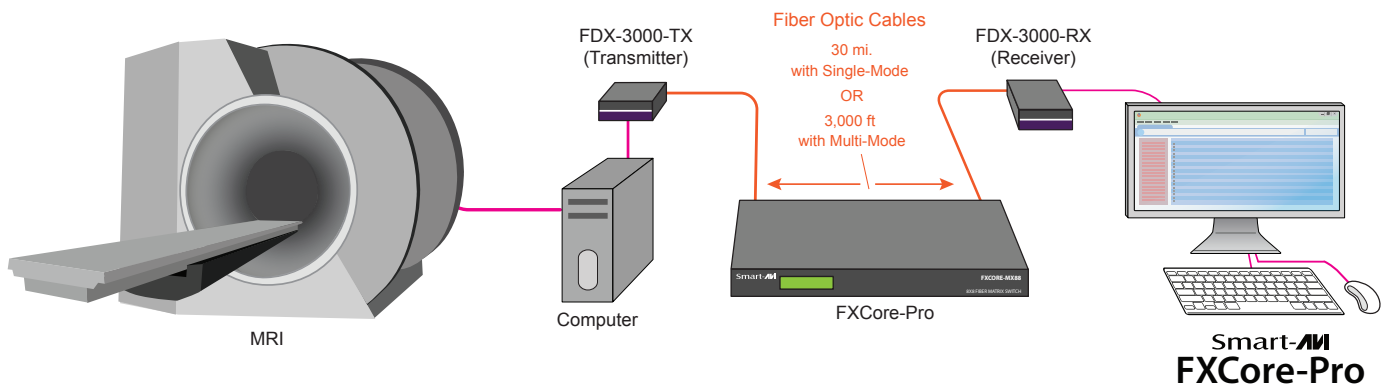
KVM Operation via Fiber Optics with FXCore-Pro and FDX-3000



Most public and private schools require secure system networks to run optimally. Reliable routing infrastructure is key, and the FXCore-Pro enables these institutions to link servers with users using the FDX-3000 extenders to establish long distance communication. With KVM functionality, system administrators can even access each computer remotely, taking command of keyboard-mouse functions and HD audio/video displays.

Medical Campuses

Medical Device Operation via Fiber Optics with FXCore-Pro and FDX-3000



Modern medical facilities grow increasingly digitized every year. With high-quality USB functionality, FXCore-Pro offers medical professionals secure connection to remote servers or PCs via the matrix at record speeds. The FXCore-Pro, in concert with the FDX-3000, extends and enhances digital command of a medical environment, allowing for the secure transfer of data, video, and USB device signals without risk of interference or interception from outside sources.



SPECIFICATIONS

FXCore-Pro Technical Specifications

OPTICAL	
Input Connector	Full Duplex multimode LC (Connecting to TX and RX units requires LC to LC connectors.)
Type	8 singlemode/multimode full duplex LC fiber optic inputs and outputs
Wavelength	850nm, VCSEL Class 1 AEL Laser
Operating Distance	Up to 3,000 feet in Multimode Up to 15 miles in Singlemode
Connector Compliance	FC-PI 200-M5-SN-I and 200-M6-SN-I 2.125 GBd FC-PI 100-M5-SN-I, FC-PI 100-M6-SN-I, FC-PH2 100-M5-SN and FC-PH2 100-M6-SN-I 1.0625 GBd
Receiver Sensitivity	-21 dB Max
TX Output	Optical Power (Average) -10dBm
RX Input	Optical modulation amplitude (min) -17dBm
Channel Routing	8x8 Non blocking
Control	RS-232 9600bps
OTHER	
Power	110V/220V internal power supply 40W
Video	Format: DVI-D Single Line Maximum Pixel Clock: 165 MHz Resolution: Up to 1920 x 1200 @60Hz
Audio Compatibility	Signal Type - Stereo Audio Bandwidth - 15MHz, 0dB Impedance - 10K Ohm
RS-232	Speed: Up to 115 Kbps
General	Operating Temp.: 0-55 °C (32-131°F) Storage Temp.: -20-85 °C (-4-185 °F) Humidity: Up to 95%
Dimensions	17" W x 10.8" D x 1.8" H

FDX-3000 Specifications

VIDEO	
Input Interface	DVI-D Female (Single-Link)
Resolution	1920x1200 at 60Hz
DDC	Internal Table can be Re-programmed
AUDIO	
Signal Type	Stereo Audio
Bandwidth	15MHz, 0dB
Impedance	10K Ohm
Connector	3.5mm Stereo Mini Female
OTHER	
RS-232	Data up to 115,000bps
USB	USB Keyboard and Mouse Compliant
Fiber Optics	3,000 feet in Multimode 15 miles in Singlemode Fiber-Plug type LC
Dimensions	4.5"x5.5"x1.70"
Weight	8 Lbs.



ORDERING INFORMATION

PART NO.	DESCRIPTION (Multimode)
FXCM-MX0404S	FXCore Fiber Optic Multimode 4 PCs x 4 Users KVM Matrix Switch. Includes: [FXCM-MX0404, SM-CSW, & CCPWR06]
FXCM-MX0408S	FXCore Fiber Optic Multimode 4 PCs x 8 Users KVM Matrix Switch. Includes: [FXCM-MX0408, SM-CSW, & CCPWR06]
FXCM-MX0412S	FXCore Fiber Optic Multimode 4 PCs x 12 Users KVM Matrix Switch. Includes: [FXCM-MX0412, SM-CSW, & CCPWR06]
FXCM-MX0804S	FXCore Fiber Optic Multimode 8 PCs x 4 Users KVM Matrix Switch. Includes: [FXCM-MX0804, SM-CSW, & CCPWR06]
FXCM-MX0808S	FXCore Fiber Optic Multimode 8 PCs x 8 Users KVM Matrix Switch. Includes: [FXCM-MX0808, SM-CSW, & CCPWR06]
FXCM-MX0812S	FXCore Fiber Optic Multimode 8 PCs x 12 Users KVM Matrix Switch. Includes: [FXCM-MX0812, SM-CSW, & CCPWR06]
FXCM-MX1204S	FXCore Fiber Optic Multimode 12 PCs x 4 Users KVM Matrix Switch. Includes: [FXCM-MX1204, SM-CSW, & CCPWR06]
FXCM-MX1208S	FXCore Fiber Optic Multimode 12 PCs x 8 Users KVM Matrix Switch. Includes: [FXCM-MX1208, SM-CSW, & CCPWR06]
FXCM-MX1212S	FXCore Fiber Optic Multimode 12 PCs x 12 Users KVM Matrix Switch. Includes: [FXCM-MX1212, SM-CSW, & CCPWR06]
FXCM-MX1616S	FXCore Fiber Optic Multimode 16 PCs x 16 Users KVM Matrix Switch. Includes: [FXCM-MX1616, SM-CSW, & CCPWR06]
FDX-TX3000S	DVI-D, Audio, USB Keyboard and Mouse, and RS-232 Fiber Optic Multimode Transmitter. Includes: [FDX-TX3000, PS5VD4A]
FDX-RX3000S	DVI-D, Audio, USB Keyboard and Mouse, and RS-232 Fiber Optic Multimode Receiver. Includes: [FDX-RX3000, PS5VD4A]
PART NO.	DESCRIPTION (Singlemode)
FXCS-MX0404S	FXCore Fiber Optic Singlemode 4 PCs x 4 Users KVM Matrix Switch. Includes: [FXCM-MX0404, SM-CSW, & CCPWR06]
FXCS-MX0408S	FXCore Fiber Optic Singlemode 4 PCs x 8 Users KVM Matrix Switch. Includes: [FXCM-MX0408, SM-CSW, & CCPWR06]
FXCS-MX0412S	FXCore Fiber Optic Singlemode 4 PCs x 12 Users KVM Matrix Switch. Includes: [FXCM-MX0412, SM-CSW, & CCPWR06]
FXCS-MX0804S	FXCore Fiber Optic Singlemode 8 PCs x 4 Users KVM Matrix Switch. Includes: [FXCM-MX0804, SM-CSW, & CCPWR06]
FXCS-MX0808S	FXCore Fiber Optic Singlemode 8 PCs x 8 Users KVM Matrix Switch. Includes: [FXCM-MX0808, SM-CSW, & CCPWR06]
FXCS-MX0812S	FXCore Fiber Optic Singlemode 8 PCs x 12 Users KVM Matrix Switch. Includes: [FXCM-MX0812, SM-CSW, & CCPWR06]
FXCS-MX1204S	FXCore Fiber Optic Singlemode 12 PCs x 4 Users KVM Matrix Switch. Includes: [FXCM-MX1204, SM-CSW, & CCPWR06]
FXCS-MX1208S	FXCore Fiber Optic Singlemode 12 PCs x 8 Users KVM Matrix Switch. Includes: [FXCM-MX1208, SM-CSW, & CCPWR06]
FXCS-MX1212S	FXCore Fiber Optic Singlemode 12 PCs x 12 Users KVM Matrix Switch. Includes: [FXCM-MX1212, SM-CSW, & CCPWR06]
FXCS-MX1616S	FXCore Fiber Optic Singlemode 16 PCs x 16 Users KVM Matrix Switch. Includes: [FXCM-MX1616, SM-CSW, & CCPWR06]
FDX-TX3500S	DVI-D, Audio, USB Keyboard and Mouse, and RS-232 Fiber Optic Singlemode Transmitter Includes: [FDX-TX3500, PS5VD4A]
FDX-RX3500S	DVI-D, Audio, USB Keyboard and Mouse, and RS-232 Fiber Optic Singlemode Receiver. Includes: [FDX-RX3500, PS5VD4A]



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