

# Matrox Avio™ Series



## Dual-DVI Fiber Optic KVM Extender Delivers Uncompromised Performance

Matrox Avio Series KVM extenders enable users to work off their computers from a distance, while maintaining real-time performance. Featuring a transmitter/receiver pair, Avio delivers uncompressed, zero-latency transmission of dual digital video, USB and audio signals from the host system by up to 10 km (6.2 mi) over a single duplex LC-LC fiber optic cable. Users benefit from exceptional graphics and smooth HD video playback, with no dropped frames, while all workstations remain in a climate controlled machine room for simple IT maintenance and security.

### Key Features:

- 10Gbps SFP+ transceivers enable uncompressed video transmission at full frame rate across a single duplex LC-LC fiber optic cable
- Smooth HD, 2K, 4K video playback without dropping any frames
- Two Single-link DVI monitor or one Dual-link DVI display support
- USB HID ports for keyboard, mouse, touchscreens and other HID devices.
- USB 2.0 high-speed support for touchscreens, printers, scanners, hard drives, as well as isochronous USB 2.0 audio and video devices (available with Avio F125)
- Maximum distances of 400 m (1312 ft) in multimode and 10 km (6.2 mi) in single-mode <sup>1</sup>
- Digital-to-analog conversion enables support for 2x VGA monitors with a maximum resolution of 1920x1200 60Hz
- Analog stereo audio support to place audio devices such as speakers, microphones and headphones away from the system
- DDC compliance and advanced EDID management ensure a reliable communication between the system and the remote displays
- HDCP compliance for protected content playback (available with Avio F125)<sup>2</sup>
- PS/2 keyboard and mouse support for industrial or legacy systems
- Local outputs on the Avio transmitter unit for easy maintenance or to share the remote desktop on a collaborative video wall
- Passive cooling (no fan) for silent operation and extra reliability
- On-screen Display (OSD) to view diagnostic information and access advanced configuration options
- Rack mountable or stand alone units
- Plug & play design for easy deployment with no software installation
- Compatibility with Microsoft® Windows®, Mac OS X®, Linux® and UNIX® operating systems
- Compatible with select layer one fiber optic network switches
- Global sales and technical support

<sup>1</sup> Matrox Avio SFP+ Single-Mode upgrade kit required (Part# AV-SFP10G-2SMF)

<sup>2</sup> HDCP pass through is available on Avio F125 and requires an HDCP compliant video source and destination. By default, HDCP is disabled and can be enabled through the Avio OSD.



# Matrox Avio Series Specifications

	Avio F120		Avio F125	
Product	Transmitter	Receiver	Transmitter	Receiver
<b>Part Number</b>	AV-F120TXF	AV-F120RXF	AV-F125TXF	AV-F125RXF
<b>Connections to Host System</b>				
<b>Video Connector #1</b>	1x DVI-D SL/DL	–	1x DVI-D SL/DL	–
<b>Video Connector #2</b>	1x DVI-D SL	–	1x DVI-D SL	–
<b>USB HID Type Mini-B</b>	2	–	3	–
<b>USB 2.0 Type B</b>	1	–	1	–
<b>PS/2 Keyboard &amp; Mouse</b>	1 & 1	–	1 & 1	–
<b>Line In &amp; Line Out (3.5mm)</b>	1 & 1	–	1 & 1	–
<b>Connections to Local Devices</b>				
<b>Video Connector #1<sup>1</sup></b>	1x DVI-I SL/DL	1x DVI-I SL/DL	1x DVI-I SL/DL	1x DVI-I SL/DL
<b>Video Connector #2</b>	1x DVI-I SL	1x DVI-I SL	1x DVI-I SL	1x DVI-I SL
<b>Analog VGA<sup>2</sup></b>	2	2	2	2
<b>USB HID Type A</b>	2	4	2	2
<b>USB 2.0 Type A</b>	2	–	2	4
<b>PS/2 Keyboard &amp; Mouse</b>	1 & 1	1 & 1	1 & 1	1 & 1
<b>Mic In &amp; Headphone out (3.5mm)</b>	1 & 1	1 & 1	1 & 1	1 & 1
<b>Line In &amp; Line Out (3.5mm)</b>	1 & 1	1 & 1	1 & 1	1 & 1
<b>USB Type B (Debug Port)</b>	–	1	–	1
<b>Maximum Video Output Resolution</b>				
<b>DVI Single Link (SL)</b>	2x 1920x1200 60Hz 2x 2048x1080 60Hz		2x 1920x1200 60Hz 2x 2048x1080 60Hz	
<b>DVI Dual Link (DL)</b>	1x 2560x1600 60Hz 1x 4096x2160 24Hz, 30Hz		1x 2560x1600 60Hz 1x 4096x2160 24Hz, 30Hz	
<b>Analog VGA</b>	2x 1920x1200 60Hz		2x 1920x1200 60Hz	
<b>General</b>				
<b>Status LED Indicators</b>	2	2	2	2
<b>OSD Menu</b>	Yes	Yes	Yes	Yes
<b>HDCP Compliant<sup>3</sup></b>	–	–	Yes	Yes
<b>Enclosure Dimensions</b>	8.5"x1.65"x5.34"	8.5"x1.65"x5.34"	8.5"x1.65"x5.34"	8.5"x1.65"x5.34"
<b>Standalone (S) or Rack-Mountable (R)</b>	S/R	S/R	S/R	S/R
<b>Power Supply Unit (PSU)</b>	1x external 12V	1x external 12V	1x external 12V	1x external 12V
<b>Cables Included<sup>4</sup></b>	2x DVI-D Cables, 1x USB A-B, 4x Power Cords	4x Power Cords	2x DVI-D Cables, 1x USB A-B, 2x 3.5mm Audio Stereo Cable, 4x Power Cords	4x Power Cords
<b>Connection between Transmitter and Receiver units<sup>5</sup></b>				
<b>LC Connectors</b>	2		2	
<b>Maximum Distance in Multimode (MM)</b>	400 m (1312 ft) - OM3, OM4 multi-mode 50/125 µm / 82 m (269 ft) - OM2 multi-mode 50/125µm 33 m (108 ft) - OM1 multi-mode 62.5/125µm			
<b>Maximum Distance in Single-Mode (SM)</b>	10 km (6.2 mi) - OS1, OS2 single-mode 9/125 µm			

<sup>1</sup> In Dual-link DVI mode, only a single display is supported.

<sup>2</sup> Matrox DVI-to-VGA adapter required (part number ADP-DVI-AF)

<sup>3</sup> HDCP pass through is available on Avio F125 and requires an HDCP compliant video source and destination. By default, HDCP is disabled and can be enabled through the Avio OSD.

<sup>4</sup> 6 foot long cables; power cords for North America/Japan, UK, Australia/China, Continental Europe/China

<sup>5</sup> Matrox Avio Transmitter and Receiver units include the multi-mode transceivers. Single-mode transceivers are sold separately as an upgrade kit.

## Learn More or Purchase

North America: 800-361-1408

International: 514-822-6366

Email: [graphics@matrox.com](mailto:graphics@matrox.com)

© 2014 Matrox Graphics, Inc. All rights reserved. Matrox reserves the right to change specifications without notice. Matrox and Matrox product names are registered trademarks in Canada and other countries and/or trademarks of Matrox Electronic Systems, Ltd and/or Matrox Graphics Inc. All other company and product names are registered trademarks and/or trademarks of their respective owners.

January 2014

**matrox**<sup>®</sup>  
Graphics for Professionals