

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 ¹
- 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)²
- 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

1 Matrox Avio SFP+ Single-Mode upgrade kit required (Part# AV-SFP10G-2SMF)
2 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 |
| Part Number | AV-F120TXF | AV-F120RXF | AV-F125TXF | AV-F125RXF |
| Connections to Host System | | | | |
| Video Connector #1 | 1x DVI-D SL/DL | – | 1x DVI-D SL/DL | – |
| Video Connector #2 | 1x DVI-D SL | – | 1x DVI-D SL | – |
| USB HID Type Mini-B | 2 | – | 3 | – |
| USB 2.0 Type B | 1 | – | 1 | – |
| PS/2 Keyboard & Mouse | 1 & 1 | – | 1 & 1 | – |
| Line In & Line Out (3.5mm) | 1 & 1 | – | 1 & 1 | – |
| Connections to Local Devices | | | | |
| Video Connector #1¹ | 1x DVI-I SL/DL | 1x DVI-I SL/DL | 1x DVI-I SL/DL | 1x DVI-I SL/DL |
| Video Connector #2 | 1x DVI-I SL | 1x DVI-I SL | 1x DVI-I SL | 1x DVI-I SL |
| Analog VGA² | 2 | 2 | 2 | 2 |
| USB HID Type A | 2 | 4 | 2 | 2 |
| USB 2.0 Type A | 2 | – | 2 | 4 |
| PS/2 Keyboard & Mouse | 1 & 1 | 1 & 1 | 1 & 1 | 1 & 1 |
| Mic In & Headphone out (3.5mm) | 1 & 1 | 1 & 1 | 1 & 1 | 1 & 1 |
| Line In & Line Out (3.5mm) | 1 & 1 | 1 & 1 | 1 & 1 | 1 & 1 |
| USB Type B (Debug Port) | – | 1 | – | 1 |
| Maximum Video Output Resolution | | | | |
| DVI Single Link (SL) | 2x 1920x1200 60Hz 2x 2048x1080 60Hz | | 2x 1920x1200 60Hz 2x 2048x1080 60Hz | |
| DVI Dual Link (DL) | 1x 2560x1600 60Hz 1x 4096x2160 24Hz, 30Hz | | 1x 2560x1600 60Hz 1x 4096x2160 24Hz, 30Hz | |
| Analog VGA | 2x 1920x1200 60Hz | | 2x 1920x1200 60Hz | |
| General | | | | |
| Status LED Indicators | 2 | 2 | 2 | 2 |
| OSD Menu | Yes | Yes | Yes | Yes |
| HDCP Compliant³ | – | – | Yes | Yes |
| Enclosure Dimensions | 8.5"x1.65"x5.34" | 8.5"x1.65"x5.34" | 8.5"x1.65"x5.34" | 8.5"x1.65"x5.34" |
| Standalone (S) or Rack-Mountable (R) | S/R | S/R | S/R | S/R |
| Power Supply Unit (PSU) | 1x external 12V | 1x external 12V | 1x external 12V | 1x external 12V |
| Cables Included⁴ | 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 |
| Connection between Transmitter and Receiver units⁵ | | | | |
| LC Connectors | 2 | | 2 | |
| Maximum Distance in Multimode (MM) | 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 | | | |
| Maximum Distance in Single-Mode (SM) | 10 km (6.2 mi) - OS2 single-mode 9/125 µm, 2 km (1.2 mi) - OS1 single-mode 9/125 µm | | | |

¹ In Dual-link DVI mode, only a single display is supported.

² Matrox DVI-to-VGA adapter required (part number ADP-DVI-AF)

³ 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.

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

⁵ 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

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