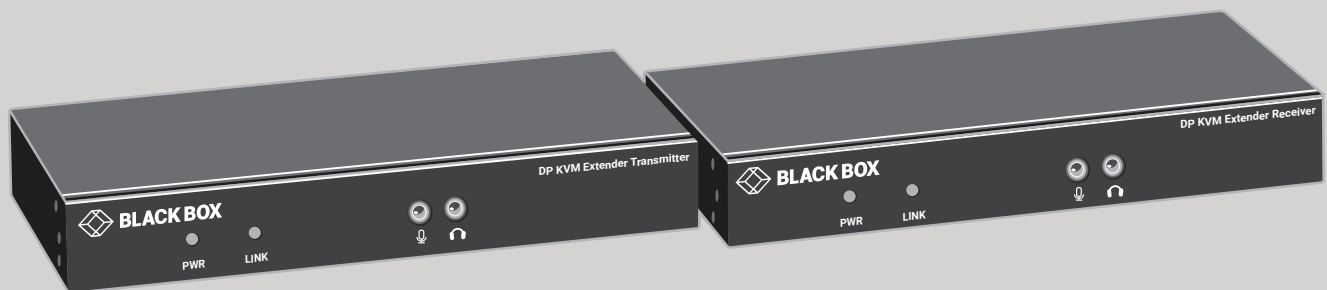


DATA SHEET

KVXLCDP-100, KVXLCDPF-100, KVXLCDP-200, KVXLCDPF-200

KVX SERIES 4K DP KVM EXTENDERS

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM



OVERVIEW

KVX SERIES DISPLAYPORT KVM EXTENDERS DATA SHEET

INTRODUCTION

The KVX Series are the Black Box® low-cost DisplayPort KVM extenders. In a point-to-point configuration, they enable you to locally use one or two DisplayPort monitors, USB keyboard/mouse/other devices, speaker, and microphone to operate a remote computer, server, or other IT device. Operation is plug-and-play.

Four versions are available:

- KVX Series DisplayPort KVM CATx Extender (KVXLCDP-100)
- KVX Series DisplayPort KVM Fiber Extender (KVXLCDPF-100)
- KVX Series Dual-Head DisplayPort KVM CATx Extender (KVXLCDP-200)
- KVX Series Dual-Head DisplayPort KVM Fiber Extender (KVXLCDPF-200)

FEATURES

- OFFERS DISPLAYPORT INPUT/OUTPUT VIDEO QUALITY UP TO 4K @ 30 HZ
- VIDEO/USB/RS-232/AUDIO BASIC EXTENSION DISTANCE IS 330 FEET (100 METERS) OVER CAT5E/6/7
- VIDEO/USB/RS-232/AUDIO BASIC EXTENSION DISTANCE IS UP TO 18.6 MILES (30 KM) USING A SINGLE-MODE SFP TRANSCEIVER MODULE OR MULTIMODE SFP FOR SHORTER DISTANCES
- THE DISPLAYPORT KVM CONSOLE EXTENDER LETS YOU CONTROL A SERVER, OR COMPUTER OVER SINGLE-MODE OR MULTIMODE FIBER OPTIC CABLE AT DISTANCES OF UP TO 30 KM (DEPENDING ON THE SFP USED, FIBER TYPE, AND FIBER BANDWIDTH*)
- SUPPORTS TRANSPARENT USB EXTENSION VIA TWO USB 2.0 PORTS PLUS TWO USB 1.1 PORTS FOR USB HUBS OR USB HIDS SUCH AS TOUCHSCREENS, PRINTERS, BARCODE READERS, KEYBOARDS, AND MICE
- SUPPLIES BIDIRECTIONAL ANALOG LINE-IN/LINE-OUT EXTENSION AND SERIAL RS-232 EXTENSION
- SUPPORTS DISPLAYPORT LOCAL VIDEO OUTPUT

*NOTE: Reference the supported SFP chart on page 4.

COMPARISON CHART

| FEATURES COMPARISON CHART | | | | |
|----------------------------|------------------|--|------------------|--|
| | KVXLCDP-100 | KVXLCDPF-100 | KVXLCDP-200 | KVXLCDPF-200 |
| AUDIO | YES | YES | YES | YES |
| RS-232 | YES | YES | YES | YES |
| TX LOCAL OUT DP CONNECTORS | (1) DISPLAYPORT | (1) DISPLAYPORT | (2) DISPLAYPORT | (2) DISPLAYPORT |
| TX INPUT DP CONNECTORS | (1) DISPLAYPORT | (1) DISPLAYPORT | (2) DISPLAYPORT | (2) DISPLAYPORT |
| RX OUTPUT DP CONNECTORS | (1) DISPLAYPORT | (1) DISPLAYPORT | (2) DISPLAYPORT | (2) DISPLAYPORT |
| MEDIA | TWISTED-PAIR | FIBEROPTIC | TWISTED-PAIR | FIBEROPTIC |
| MAXIMUM DISTANCE | 328 FEET (100 M) | UP TO 18.6 MILES (30 KM), DEPENDING ON SFP USED | 328 FEET (100 M) | UP TO 18.6 MILES (30 KM), DEPENDING ON SFP USED |
| LEVEL | ENTRY-LEVEL | ENTRY-LEVEL | ENTRY-LEVEL | ENTRY-LEVEL |



SPECIFICATIONS

KVX SERIES DISPLAYPORT KVM CATX EXTENDERS (KVXLCDP-100)



WHAT'S INCLUDED WITH THE KVXLCDP-100

- (1) DISPLAYPORT KVM CATX EXTENDER TRANSMITTER
- (1) DISPLAYPORT KVM CATX EXTENDER RECEIVER
- (2) POWER SUPPLIES (INCLUDES US, EU, UK, AND AU PLUG TYPES)
- (1) 4K DISPLAYPORT CABLE (4-FT./1.2-M)
- (1) 3.5-MM AUDIO CABLE (6-FT./1.8-M)
- (1) USB-B TO USB-A CABLE (6-FT./1.8-M)

SPECIFICATIONS FOR KVX SERIES DISPLAYPORT KVM CATX EXTENDER (KVXLCDP-100)

| SPECIFICATION | CATX TRANSMITTER | CATX RECEIVER |
|---------------------------|--|---|
| CONNECTORS | Host connection: Video Input: (1) DisplayPort female Serial Control Port: (1) DB9 female Link Port: (1) RJ-45 female USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (1) DisplayPort female | Console connection: Video Output: (1) DisplayPort female Serial Control Port: (1) DB9 male Link Port: (1) RJ-45 female USB 2.0: (4) USB Type A female Audio: (1) Mic In, (1) Speaker Out |
| DISTANCE | CATx cable: Up to 328 ft. (100 m) | CATx cable: Up to 328 ft. (100 m) |
| INDICATORS | (1) Power LED (red), (1) Link LED (green) | (1) Power LED (red), (1) Link LED (green) |
| MAXIMUM RESOLUTION | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input) | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only) |
| DDC SUPPORTED | DDC, DDC2, DDC2B | DDC, DDC2, DDC2B |
| HOUSING MATERIAL | Metal chassis | Metal chassis |
| OPERATING SYSTEM | OS independent | OS independent |
| ENVIRONMENTAL | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing |
| POWER | External 5-VDC, 2-A power supply | External 5-VDC, 2-A power supply |
| DIMENSIONS | 0.83" H x 7.09" W x 3.27" D (2.1 x 18 x 8.3 cm) | 0.83" H x 7.09" W x 3.27" D (2.1 x 18 x 8.3 cm) |
| WEIGHT | 0.82 lb. (0.372 kg) | 0.83 lb. (0.378 kg) |

SPECIFICATIONS

KVX SERIES DISPLAYPORT KVM FIBER EXTENDERS (KVXLCDPF-100)



WHAT'S INCLUDED WITH THE KVXLCDPF-100

- (1) DISPLAYPORT KVM FIBER EXTENDER TRANSMITTER
- (1) DISPLAYPORT KVM FIBER EXTENDER RECEIVER
- (2) POWER SUPPLIES (INCLUDES US, EU, UK AND AU PLUG TYPES)
- (1) 4K DISPLAYPORT CABLE (4-FT./1.2-M)
- (1) 3.5-MM AUDIO CABLE (6-FT./1.8-M)
- (1) USB-B TO USB-A CABLE (6-FT./1.8-M)

NOTE: SFP not included, must be ordered separately. See chart below.

| SPECIFICATIONS FOR KVX SERIES DISPLAYPORT KVM FIBER EXTENDER (KVXLCDPF-100) | | |
|---|--|---|
| SPECIFICATION | FIBER TRANSMITTER | FIBER RECEIVER |
| CONNECTORS | Host connection: Video Input: (1) DisplayPort female Serial Control Port: (1) DB9 female Link Port: (1) SFP cage USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (1) DisplayPort female | Console connection: Video Output: (1) DisplayPort female Serial Control Port: (1) DB9 male Link Port: (1) SFP cage USB 2.0: (4) USB Type A female Audio: (1) Mic In, (1) Speaker Out |
| DISTANCE | Fiber optic cable: Up to 18.6 miles (30 km), depending on SFP used | Fiber optic cable: Up to 18.6 miles (30 km), depending on SFP used |
| INDICATORS | (1) Power LED | (1) Power LED |
| MAXIMUM RESOLUTION | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input) | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only) |
| DDC SUPPORTED | DDC, DDC2, DDC2B | DDC, DDC2, DDC2B |
| HOUSING MATERIAL | Metal chassis | Metal chassis |
| OPERATING SYSTEM | OS independent | OS independent |
| ENVIRONMENTAL | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing |
| POWER | External 5-VDC, 2-A power supply | External 5-VDC, 2-A power supply |
| DIMENSIONS | 0.83" H x 7.09" W x 3.27" D (2.1 x 18 x 8.3 cm) | 0.83" H x 7.09" W x 3.27" D (2.1 x 18 x 8.3 cm) |
| WEIGHT | 0.82 lb. (0.372 kg) (no SFP) | 0.83 lb. (0.378 kg) (no SFP) |

NOTE: SFP modules are not included and must be ordered separately. See the chart below.

| COMPATIBLE SFP MODULES | | |
|---------------------------|--|----------|
| PART NUMBER | DESCRIPTION | DISTANCE |
| 1-GBPS CONNECTIONS | | |
| LFP441 | SFP 1.25-Gb, 850-nm Multimode Fiber, LC | 550 m |
| LFP442 | SFP 1.25-Gb, 1310-nm Single-mode Fiber, LC | 20 km |
| LFP412 | SFP with Extended Diagnostics - 1250-Mbps Multimode Fiber, 1310-nm | 2 km |
| LFP413 | SFP with Extended Diagnostics - 1250-Mbps Single-Mode Fiber, 1310-nm | 10 km |
| LFP414 | SFP with Extended Diagnostics - 1250-Mbps, Singlemode Fiber, 1310-nm | 30 km |
| LFP416 | SFP 1250-Mbps, Extended Diagnostics, 10/100/1000BASE-T, SGMII Interface, RJ-45 | 100 m |

NOTE: Other SFPs may work but have not been validated by Black Box, we recommend you use the suggested SFPs to avoid technical incompatibilities.



SPECIFICATIONS

KVX SERIES DISPLAYPORT DUAL-HEAD KVM CATX EXTENDERS (KVXLCDP-200)



CATx Transmitter



CATx Transmitter



CATx Receiver



CATx Receiver

WHAT'S INCLUDED WITH THE KVXLCDP-200

- (1) DISPLAYPORT DUAL-HEAD KVM CATX EXTENDER TRANSMITTER
- (1) DISPLAYPORT DUAL-HEAD KVM CATX EXTENDER RECEIVER
- (2) POWER SUPPLIES (INCLUDES US, EU, UK AND AU PLUG TYPES)
- (2) 4K DISPLAYPORT CABLES (4-FT./1.2-M)
- (1) 3.5-MM AUDIO CABLE (6-FT./1.8-M)
- (1) USB-B TO USB-A CABLE (6-FT./1.8-M)

SPECIFICATIONS FOR KVX SERIES DISPLAYPORT DUAL-HEAD KVM CATX EXTENDER (KVXLCDP-200)

| SPECIFICATION | CATX TRANSMITTER | CATX RECEIVER |
|---------------------------|--|---|
| CONNECTORS | Host connection: Video Input: (2) DisplayPort female Serial Control Port: (1) DB9 female Link Port: (1) RJ-45 female USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (2) DisplayPort female | Console connection: Video Output: (2) DisplayPort female Serial Control Port: (1) DB9 male Link Port: (1) RJ-45 female USB 2.0: (4) USB Type A female Audio: (1) Mic In, (1) Speaker Out |
| DISTANCE | CATx cable: Up to 328 ft. (100 m) | CATx cable: Up to 328 ft. (100 m) |
| INDICATORS | (1) Power LED (red), (1) Link LED (green) | (1) Power LED (red), (1) Link LED (green) |
| MAXIMUM RESOLUTION | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input) | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only) |
| DDC SUPPORTED | DDC, DDC2, DDC2B | DDC, DDC2, DDC2B |
| HOUSING MATERIAL | Metal chassis | Metal chassis |
| OPERATING SYSTEM | OS independent | OS independent |
| ENVIRONMENTAL | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing |
| POWER | External 5-VDC, 2-A power supply | External 5-VDC, 2-A power supply |
| DIMENSIONS | 1.71" H x 7.09" W x 3.27" D (4.4 x 18.0 x 8.3 cm) | 1.71" H x 7.09" W x 3.27" D (4.4 x 18.0 x 8.3 cm) |
| WEIGHT | 0.84 lb. (0.381 kg) | 0.85 lb. (0.386 kg) |



SPECIFICATIONS

KVX SERIES DISPLAYPORT DUAL-HEAD KVM FIBER EXTENDERS (KVXLCDPF-200)



WHAT'S INCLUDED WITH THE KVXLCDPF-200

- (1) DISPLAYPORT DUAL-HEAD KVM FIBER EXTENDER TRANSMITTER
- (1) DISPLAYPORT DUAL-HEAD KVM FIBER EXTENDER RECEIVER
- (2) POWER SUPPLIES (INCLUDES US, EU, UK AND AU PLUG TYPES)
- (2) 4K DISPLAYPORT CABLES (4-FT./1.2-M)
- (1) 3.5-MM AUDIO CABLE (6-FT./1.8-M)
- (1) USB-B TO USB-A CABLE (6-FT./1.8-M)

NOTE: SFP not included, must be ordered separately. See chart below.

| SPECIFICATIONS FOR KVX SERIES DISPLAYPORT DUAL-HEAD KVM FIBER EXTENDER (KVXLCDPF-200) | | |
|---|--|---|
| SPECIFICATION | FIBER TRANSMITTER | FIBER RECEIVER |
| CONNECTORS | Host connection: Video Input: (2) DisplayPort female Serial Control Port: (1) DB9 female Link Port: (1) SFP cage USB: (1) USB Type B female Audio: (1) Line in, (1) Line out; Local Video Output: (2) DisplayPort female | Console connection: Video Output: (2) DisplayPort female Serial Control Port: (1) DB9 male Link Port: (1) SFP cage USB 2.0: (4) USB Type A female Audio: (1) Mic In, (1) Speaker Out |
| DISTANCE | Fiber optic cable: Up to 18.6 miles (30 km), depending on SFP used | Fiber optic cable: Up to 18.6 miles (30 km), depending on SFP used |
| INDICATORS | (1) Power LED | (1) Power LED |
| MAXIMUM RESOLUTION | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input) | 4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only) |
| DDC SUPPORTED | DDC, DDC2, DDC2B | DDC, DDC2, DDC2B |
| HOUSING MATERIAL | Metal chassis | Metal chassis |
| OPERATING SYSTEM | OS independent | OS independent |
| ENVIRONMENTAL | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing | Operating Temperature: 32 to 122° F (0 to 50° C); Storage Temperature: -4 to +140° F (-20 to +60° C); Operating Humidity: 0 to 80%, noncondensing |
| POWER | External 5-VDC, 2-A power supply | External 5-VDC, 2-A power supply |
| DIMENSIONS | 1.71" H x 7.09" W x 3.27" D (4.4 x 18.0 x 8.3 cm) | 1.71" H x 7.09" W x 3.27" D (4.4 x 18.0 x 8.3 cm) |
| WEIGHT | 0.85 lb. (0.386 kg) (no SFP) | 0.85 lb. (0.386 kg) (no SFP) |

NOTE: SFP modules are not included and must be ordered separately. See the chart below.

| COMPATIBLE SFP MODULES | | |
|---------------------------|--|----------|
| PART NUMBER | DESCRIPTION | DISTANCE |
| 1-GBPS CONNECTIONS | | |
| LFP441 | SFP 1.25-Gb, 850-nm Multimode Fiber, LC | 550 m |
| LFP442 | SFP 1.25-Gb, 1310-nm Single-mode Fiber, LC | 20 km |
| LFP412 | SFP with Extended Diagnostics - 1250-Mbps Multimode Fiber, 1310-nm | 2 km |
| LFP413 | SFP with Extended Diagnostics - 1250-Mbps Single-Mode Fiber, 1310-nm | 10 km |
| LFP414 | SFP with Extended Diagnostics - 1250-Mbps, Singlemode Fiber, 1310-nm | 30 km |
| LFP416 | SFP 1250-Mbps, Extended Diagnostics, 10/100/1000BASE-T, SGMII Interface, RJ-45 | 100 m |

NOTE: Other SFPs may work but have not been validated by Black Box, we recommend you use the suggested SFPs to avoid technical incompatibilities.



