

# DATA SHEET

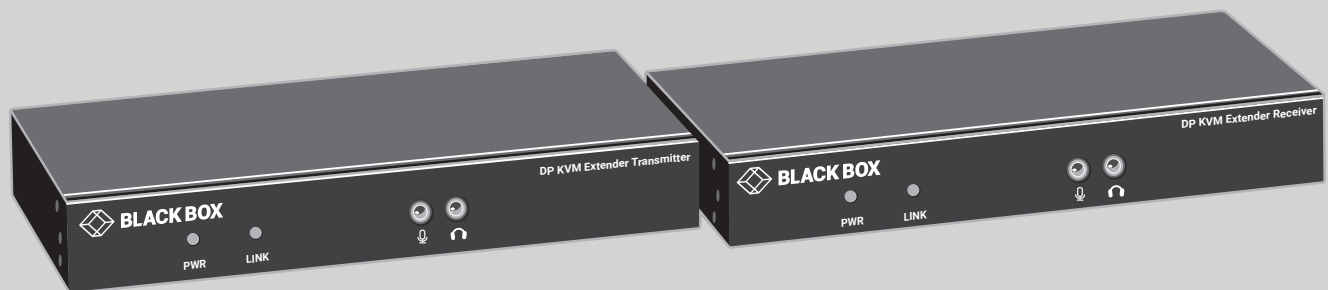
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KVXLCDP-100, KVXLCDPF-100, KVXLCDP-200, KVXLCDPF-200

# KVX SERIES 4K DP KVM EXTENDERS

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24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT [BLACKBOX.COM](http://BLACKBOX.COM)



**BLACK BOX**

# 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)

FRONT VIEW



CATx Transmitter

BACK VIEW



CATx Transmitter

FRONT VIEW



CATx Receiver

BACK VIEW



CATx Receiver

### WHAT'S INCLUDED WITH THE KVXLCDP-100

- (1) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES US, EU, AND UK PLUG TYPES)
- (1) DISPLAYPORT CABLE, M/M 1.2M (4 FT.)
- (1) USB TYPE A TO B CABLE, M/M 1.8M (6 FT.)
- (1) 3.5MM DUAL AUDIO/MIC CABLE, M/M 1.8M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK)

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

SPECIFICATION	CATX TRANSMITTER	CATX RECEIVER
<b>CONNECTORS</b>	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
<b>DISTANCE</b>	CATx cable: Up to 328 ft. (100 m)	CATx cable: Up to 328 ft. (100 m)
<b>INDICATORS</b>	(1) Power LED (red), (1) Link LED (green)	(1) Power LED (red), (1) Link LED (green)
<b>MAXIMUM RESOLUTION</b>	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input)	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only)
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	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) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES US, EU, AND UK PLUG TYPES)
- (1) DISPLAYPORT CABLE, M/M 1.2M (4 FT.)
- (1) USB TYPE A TO B CABLE, M/M 1.8M (6 FT.)
- (1) 3.5MM DUAL AUDIO/MIC CABLE, M/M 1.8M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK)
- 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
<b>CONNECTORS</b>	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
<b>DISTANCE</b>	Fiberoptic cable: Up to 18.6 miles (30 km), depending on SFP used	Fiberoptic cable: Up to 18.6 miles (30 km), depending on SFP used
<b>INDICATORS</b>	(1) Power LED	(1) Power LED
<b>MAXIMUM RESOLUTION</b>	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input)	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only)
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	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
<b>1-GBPS CONNECTIONS</b>		
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) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES US, EU, AND UK PLUG TYPES)
- (2) DISPLAYPORT CABLES, 1.2M (4 FT.)
- (1) USB TYPE A TO B CABLE, M/M 1.8M (6 FT.)
- (1) 3.5MM DUAL AUDIO/MIC CABLE, M/M 1.8M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK)

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

SPECIFICATION	CATX TRANSMITTER	CATX RECEIVER
<b>CONNECTORS</b>	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
<b>DISTANCE</b>	CATx cable: Up to 328 ft. (100 m)	CATx cable: Up to 328 ft. (100 m)
<b>INDICATORS</b>	(1) Power LED (red), (1) Link LED (green)	(1) Power LED (red), (1) Link LED (green)
<b>MAXIMUM RESOLUTION</b>	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input)	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only)
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	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) TRANSMITTER
- (1) RECEIVER
- (2) 5V, 2A POWER SUPPLIES (INCLUDES US, EU, AND UK PLUG TYPES)
- (2) DISPLAYPORT CABLES 1.2M (4 FT.)
- (1) USB TYPE A TO B CABLE, M/M 1.8M (6 FT.)
- (1) 3.5MM DUAL AUDIO/MIC CABLE, M/M 1.8M (6 FT.)
- (2) DESKMOUNT KITS WITH SCREWS (KVXLC-DMK)

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
<b>CONNECTORS</b>	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
<b>DISTANCE</b>	Fiberoptic cable: Up to 18.6 miles (30 km), depending on SFP used	Fiberoptic cable: Up to 18.6 miles (30 km), depending on SFP used
<b>INDICATORS</b>	(1) Power LED	(1) Power LED
<b>MAXIMUM RESOLUTION</b>	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-, 10-bit input)	4K @ 30 Hz, 3840 x 2160 @ 30 Hz (8-bit output only)
<b>DDC SUPPORTED</b>	DDC, DDC2, DDC2B	DDC, DDC2, DDC2B
<b>HOUSING MATERIAL</b>	Metal chassis	Metal chassis
<b>OPERATING SYSTEM</b>	OS independent	OS independent
<b>ENVIRONMENTAL</b>	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
<b>POWER</b>	External 5-VDC, 2-A power supply	External 5-VDC, 2-A power supply
<b>DIMENSIONS</b>	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)
<b>WEIGHT</b>	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
<b>1-Gbps CONNECTIONS</b>		
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.



