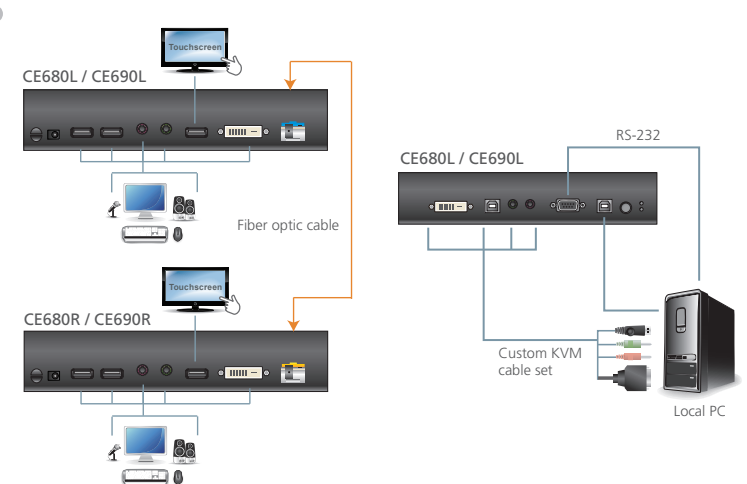# DVI Optical KVM Extender / Long Distance DVI Optical KVM Extender

CE680 / CE690

The CE680/CE690 is a DVI Optical KVM Extender that overcomes length restrictions of standard DVI cables by using fiber optics to send high-definition audio, video and control signals over longer distances. The CE680/CE6890 can transmit KVM DVI signals over very long distances - from 600 m (CE680) to 20 km (CE690) away from the source. The extender takes audio/video streams from the local source and serializes the data to pass it over a single 3.125 Gbps optical link, for resolutions up to 1920 x 1200 @ 60 Hz, 24-bits, with picture-perfect quality.

In addition to extending keyboard and mouse control, the CE680/CE690 also transfers RS-232 signals (up to 115 kbps) and USB signals in both directions, with ports for both, allowing you to connect serial devices, such as barcode scanners, or USB devices such as touchscreens, which can provide access to a computer connected at the local site.

The CE680/CE690 allows access to a computer from both the local and remote consoles (USB keyboard, monitor and mouse). Furthermore, the CE680/CE690 takes advantage of the latest fiber optic cable technology to connect the local and remote units providing easy installation and vast extension of KVM DVI signals.

| Console: USB | Computers: USB | DVI-D | OS Support: Win, Linux, Mac, Sun | Resolution 1920 x 1200 | RS-232 Channel |
| Audio: Mic. & Speaker | Wide Screen Support | Multifunction mice | Touch Panel | FIBER | Rack Mountable |

Features

- Allows access to a computer or KVM installation from a local / remote console
- Supports DVI-D interface and allows transmission of DVI single-link signals
- Superior video quality of up to 1920 x 1200 @ 60 Hz (24-bit) - receive an excellent, crisp image on your screen over long distances (CE680: up to 600 m, CE690: up to 20 km)
- Touchscreen support - connect a generic touchscreen, including up to 10-point multi-touch devices, to accommodate highly interactive applications (no extra drivers needed)
- Dual console operation - control your system from both the local and remote USB keyboard, monitor and mouse consoles
- Uses one fiber optic cable to connect the local and remote units
- HDCP-compatible
- RS-232 serial port–connect to a serial terminal or serial devices such as barcode scanners (baud rate: 115200 bps)
- PC Wakeup support–use a pushbutton on a Remote Unit to wake a PC at the local site via RS-232
- Audio-enabled - supports stereo speakers and microphone
- Rack-mountable

CE680L / CE690L

Fiber optic cable

CE680R / CE690R

RS-232

CE680L / CE690L

Custom KVM cable set

Local PC

Specifications

Function		CE680L/CE690L	CE680R/CE690R
Connectors	KVM Ports — Video	1 x DVI-D Female (White)	N/A
	KVM Ports — Speaker	1 x Mini Stereo Jack Female (Green)	N/A
	KVM Ports — Mic.	1 x Mini Stereo Jack Female (Pink)	N/A
	KVM Ports — USB (KB / Mouse)	1 x USB Type B Female (White)	N/A
	KVM Ports — USB (Touch Panel)	1 x USB Type B Female (White)	N/A
	Console Ports — Keyboard	1 x USB Type A Female (White)	
	Console Ports — Video	1 x DVI-D Female (White)	
	Console Ports — Mouse	1 x USB Type A Female (White)	
	Console Ports — Speaker	1 x Mini Stereo Jack Female (Green)	
	Console Ports — Mic.	1 x Mini Stereo Jack Female (Pink)	
	Console Ports — USB (Touch Panel)	1 x USB Type A Female (White)	
	RS-232	1 x DB-9 Female (Black)	1 x DB-9 Male (Black)
	Power	1 x DC Jack (Black)	
	Optical In/Out	1 x Bi-directional SFP (LC) *	
LEDs	Local	1 (Green)	N/A
	Remote	1 (Green)	1 (Green)
	Link	N/A	1 (Green)
Switches	Operation Mode Selection	1 x Pushbutton	
	Wakeup PC	N/A	1 x Pushbutton
Fiber Optics	Operating Distance**	600m (CE680) / 20km (CE690) with (SM) fiber	
	Wavelength	1310 / 1550 nm for SM	
	Data Rate	Single fiber: 3.125 Gbps	
Power Consumption		DC 5.3 V, 10.2 W	DC 5.3 V, 9.0 W
Environment	Operating Temperature	0° to 50° C	
	Storage Temperature	-20° to 60 °C	
	Humidity	0 - 80% RH, Non-condensing	
Physical Properties	Housing	Metal	
	Weight	1.10 kg	1.08 kg
	Dimensions (L×W×H)	21.50 x 16.29 x 4.18 cm	21.50 x 16.29 x 4.18 cm

Note: * The optical fiber modules are color-coded accordingly.
- CE680L - Blue • CE680R - Yellow • CE690L - Purple • CE690R - White
**1. Operating distance is approximate. A typical maximum distance may vary depending on factors such as fiber type, bandwidth, connector splicing, losses, modal or chromatic dispersion, environmental factors, and kinks.
2. It is recommended that you use a Single Mode optical fiber cable that conforms to IEC 60793-2-50 B1.1 or ITU-T G.652.B specifications.
3. The CE680 supports OM3 optical fiber which can extend the transmission distance up to 300 meters.

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