# CE680 / CE690

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

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 very long distances –up to 600 m for CE680; up to 20 km for CE690 away from the source. The extendertakes 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 @ 60Hz, 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 - up to 600 m for CE680; up to 20 km for CE690.

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 newest fiber optic cable technology to connect the local and remote units; providing easy installation and a very longextension of KVM DVI signals.



CE680L / CE690L

Fiber Optic cable

CE680R / CE690R

CE680L / CE690L

RS-232

Custom KVM cable set

Local PC

## 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-bits) –get an excellent, crisp image on your screen over long distance transmissions (up to 600 m for CE680; up to 20 km for CE690)
- Touchscreen support -  connect a generic touchscreen, including devices up to 10-point multi-touch, 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
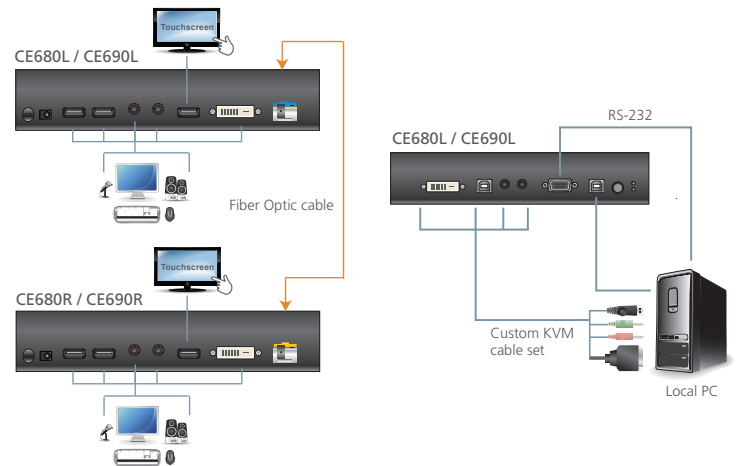
## Specification

| Function | | CE680L/CE690L | CE680R/CE690R |
|---|---|---|---|
| Connectors | KVM Ports | Video | 1 x DVI-D Female (White) | N/A |
| | | Speaker | 1 x Mini Stereo Jack Female (Green) | N/A |
| | | Mic. | 1 x Mini Stereo Jack Female (Pink) | N/A |
| | | USB (KB / Mouse) | 1 x USB Type B Female (White) | N/A |
| | | USB (Touch Panel) | 1 x USB Type B Female (White) | N/A |
| | Console Port | Keyboard | 1 x USB Type A Female (White) | |
| | | Video | 1 x DVI-D Female (White) | |
| | | Mouse | 1 x USB Type A Female (White) | |
| | | Speaker | 1 x Mini Stereo Jack Female (Green) | |
| | | Mic. | 1 x Mini Stereo Jack Female (Pink) | |
| | | 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: 3.125G bps | |
| Power Consumption | | | DC5.3V, 10.2W | DC5.3V, 9.0W |
| Environment | Operating Temperature | | 0–50ºC | |
| | Storage Temperature | | -20–60ºC | |
| | 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.