

# USB True 4K DisplayPort/HDMI Optical KVM Extender

## CE980 / CE990

The ATEN CE980 / CE990 USB True 4K DisplayPort/HDMI Optical KVM Extenders ensure transmission of True 4K video, KVM and control signals over a single fiber optic cable, extending up to 10 km (CE990) / 300 m (CE980). Both models support HDR10 to deliver unparalleled True 4K video quality (3840 x 2160 @ 60 Hz, 4:4:4 / 4096 x 2160 @ 60 Hz, 4:4:4) with full color accuracy.

Thanks to a built-in DisplayPort / HDMI combo connector, the CE980 / CE990 allows for either HDMI or DisplayPort connection on both local and remote consoles, with video input and output selectable for flexible installation and mixed / matched display configurations between both ends. The CE980 / CE990 also extends keyboard / mouse control, RS-232, USB 2.0 data, and both stereo and embedded audio, including LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, and DTS-HD Master Audio, over fiber optic cabling. The privilege control function enables easy access management between local and remote consoles through an Auto/Local or Auto/Remote pushbutton, allowing flexible control switching based on operational requirements.

The CE980 / CE990 is perfect for applications that require high-quality, long-distance KVM operation extension, such as healthcare facilities, post-production, manufacturing, and more.



CE990L



CE990R



Front View

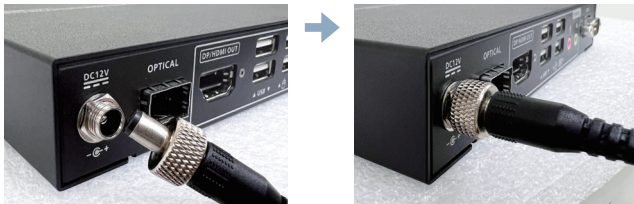


Rear View

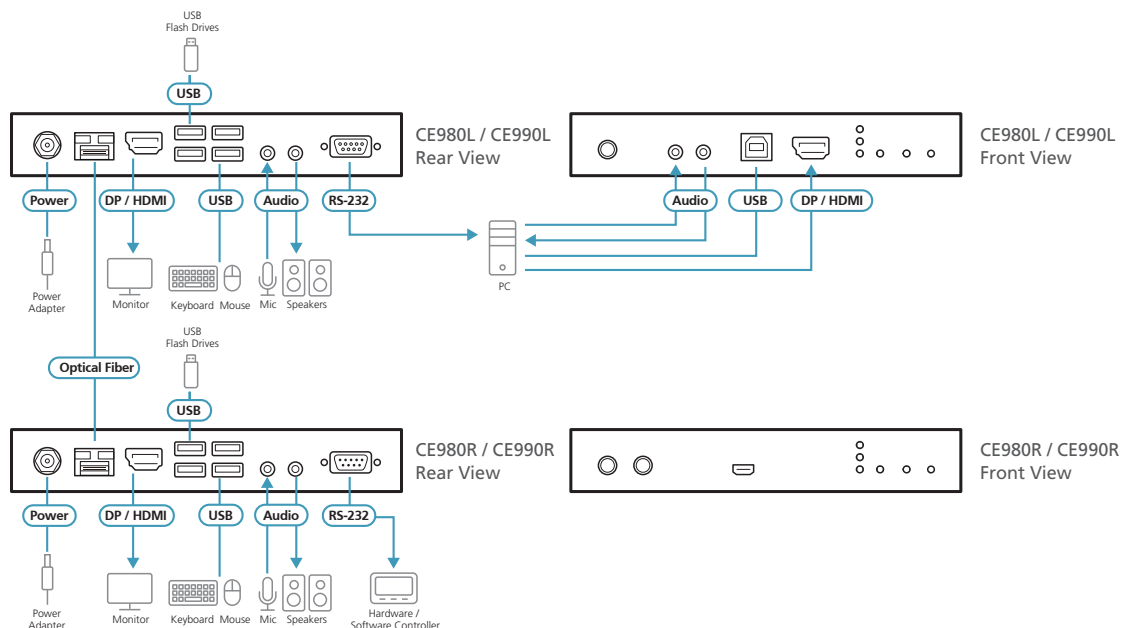


## Features

- DisplayPort/HDMI combo connector supports both DisplayPort and HDMI video interfaces
- Extends DisplayPort/HDMI video, keyboard/mouse control, stereo/embedded audio, RS-232 control, and USB 2.0 signals over fiber optic cabling
- Ultra-long distance transmission up to 300m (CE980) or 10km (CE990)
- Supports True 4K video up to 4096 x 2160 / 3840 x 2160 @ 60 Hz (4:4:4) with HDCP 2.2/2.3 compliance
- Supports HDR10 for enhanced video quality
- Dual console operation – supports local and remote system control with configurable privilege modes (Auto/Local and Auto/Remote) for streamlined access management and operational efficiency
- USB 2.0 Hub – supports 2 ports for USB KB/MS and 2 ports for other USB peripherals
- Easily switch EDID priority between Local and Remote via hotkey
- Supports wide screen format
- Supports dual independent stereo audio – mic and speaker
- Supports lossless digital audio formats such as LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus, and DTS-HD Master Audio
- Versatile SFP Modules – 2A-141G (300 m, multi-mode for CE980) and 2A-142G (10 km, single-mode for CE990) offer 10Gbps transmission via a single fiber cable
- 2X-EA17 HDMI Lock Pro for combo connector to secure HDMI cables to selected devices and prevent signal loss caused by the connector detaching
- PC wakeup function via a single pushbutton through RS-232 channel
- Plug-and-play operation with no software or driver required
- DC Jack with screw-lock ensures stable and secure connection



- Built-in 8KV/15KV ESD protection
- Rack-mountable
- Firmware upgradeable



## Specifications

	CE980L	CE980R
Connectors		
Console Ports	4 x USB Type-A Female (White) 1 x DisplayPort/HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)	4 x USB Type-A Female (White) 1 x DisplayPort/HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
KVM Ports	1 x USB Type-B Female (White) 1 x DisplayPort/HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)	N/A
RS-232	1 x DB-9 Female (Black)	1 x DB-9 Male (Black)
Power	1 x DC Jack (Black)	
Unit To Unit	1 x bi-directional SFP+ (LC)	
Video		
Max. Resolution	Up to 4096 x 2160 @ 60Hz (4:4:4) / 3840 x 2160 @ 60Hz (4:4:4)	
LEDs		
Console Status	3 (Orange)	
Video Input	1 (Orange)	N/A
Video Output	N/A	1 (Orange)
Link	1 (Orange)	
Power	1 (Green)	
Switches		
Operation Mode Selection	1 x Pushbutton	
Wakeup PC	N/A	1 x Pushbutton
Fiber Optics		
Operating Distance	300 m with Multi-Mode (MM) fiber*	
Data Rate	Single fiber: 10 Gbps	
Power Consumption	DC 12V:11.89W	DC 12V:9.49W
Environmental		
Operating Temperature	0 – 40°C	
Storage Temperature	-20 – 60°C	
Humidity	0 – 80% RH, Non-Condensing	
Physical Properties		
Housing	Metal	
Weight	0.85 kg	0.84 kg
Dimensions (L x W x H)	17.82 x 15.62 x 2.88 cm	

**Note :**

- 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.
- It is recommended that you use Multi-Mode fibers that conform to IEC 11801 (OM3) specifications.
- The device is class 1 laser product. It meet the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

## Specifications

	CE990L	CE990R
Connectors		
Console Ports	4 x USB Type-A Female (White) 1 x DisplayPort/HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)	4 x USB Type-A Female (White) 1 x DisplayPort/HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)
KVM Ports	1 x USB Type-B Female (White) 1 x DisplayPort/HDMI Female (Black) 1 x Mini Stereo Jack Female (Green) 1 x Mini Stereo Jack Female (Pink)	N/A
RS-232	1 x DB-9 Female (Black)	1 x DB-9 Male (Black)
Power	1 x DC Jack (Black)	
Unit To Unit	1 x bi-directional SFP+ (LC)	
Video		
Max. Resolution	Up to 4096 x 2160 @ 60Hz (4:4:4) / 3840 x 2160 @ 60Hz (4:4:4)	
LEDs		
Console Status	3 (Orange)	
Video Input	1 (Orange)	N/A
Video Output	N/A	1 (Orange)
Link	1 (Orange)	
Power	1 (Green)	
Switches		
Operation Mode Selection	1 x Pushbutton	
Wakeup PC	N/A	1 x Pushbutton
Fiber Optics		
Operating Distance	10 km with Single-Mode (SM) fiber*	
Data Rate	Single fiber: 10 Gbps	
Power Consumption	DC12V:11.89W	DC12V:9.49W
Environmental		
Operating Temperature	0 – 40°C	
Storage Temperature	-20 – 60°C	
Humidity	0 – 80% RH, Non-Condensing	
Physical Properties		
Housing	Metal	
Weight	0.85 kg	0.84 kg
Dimensions (L x W x H)	17.82 x 15.62 x 2.88 cm	

**Note :**

- 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.
- It is recommended that you use Single-Mode fibers that conforms to IEC 60793- 2-50 B1.1 or ITU-T G.652.B specifications.
- The device is class 1 laser product. It meet the safety regulations of IEC-60825, FDA 21 CFR 1040.10, and FDA 21 CFR 1040.11.

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