

VE781030

30 m True 4K HDMI Active Optical Cable (True 4K@30 m)



Lossless Transmission over Long Distances with True 4K HDMI AOC



**4K
TRUE**



HDMI / 18 Gbps

**HDCP
2.2**

10 m / 20 m / 30 m
True 4K HDMI Active Optical Cable

**4K
TRUE**

The [VE781010](#), [VE781020](#), and VE781030 are hybrid [True 4K](#) HDMI Active Optical Cables that integrate both optical fiber and copper wires, enabling seamless high-bandwidth data transmission in AV installations. With a slim 4.5 mm outer diameter, these EMI-resistant HDMI Active Optical cables come in lengths of 10, 20, and 30 meters, delivering vivid [True 4K](#) (4096 x 2160 @ 60 Hz, 4:4:4) visual clarity over long distances, making them ideal for [meeting rooms](#), home cinemas, and digital signage setups.

**4K
TRUE**



**HDCP
2.2**



HDR



True 4K HDR, True Immersion

Indulge in the unmatched realism of video resolution up to 4096x2160@60Hz 4:4:4, powered by 18Gbps ultra-high-speed bandwidth. This ensures smooth, vibrant image quality with stunning clarity, rich colors, and exceptional contrast, offering a truly immersive viewing experience.



**Dive in Like It's Tangible!**

Engage in a more captivating gaming experience with crisp visuals, dynamic perspectives, minimal motion blur, and enhanced fluidity. With support for 48-bit deep color and [HDR](#), enjoy stunning color accuracy and contrast for a truly immersive 3D adventure.

Superior Audio Fidelity with ARC Enhancement

ARC (Audio Return Channel) support enables two-way audio transmission between the display and the audio system, simplifying AV connections and ensuring high-quality audio output for streaming content, gaming, and other multimedia experiences.



Broad Compatibility

The HDMI Active Optical Cables are compatible with a wide range of AV devices, providing unidirectional connections to source and display devices, respectively.





Remarkable Engineering, Industry-Proven Quality

The 4K HDMI Active Optical Cables feature a German chipset, ensuring stable AV performance without blinking, black screens, or snowflakes. These cables are certified for safety and emissions by CE, FCC, RoHS, REACH, UL VW-1, and meet Class-A/Class-B EMC standards.

- **OM3 Optical Fiber:** Delivers high-speed bandwidth with no delays or flashing issues.
- **Kevlar Filler:** A material used in bulletproof vests, it enhances tensile strength, withstanding pulling forces of up to 24 kg and over 10,000 bending cycles without failure.
- **Oxygen-Free Copper (OFC):** Improves conductivity, durability, and reduces interference.
- **Double-Layer Aluminum Shield:** Provides robust protection against EMI and EMR, enhancing ARC functionality.
- **24K Gold-Plated Connector:** Designed to endure over 10,000 plug/unplug cycles for long-lasting performance.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.



Meeting Room / Office



Home Cinema



Classroom



Digital Signage



Museum





Medical Facility

[Previous](#) [Next](#)

Talk to Our Experts

If you prefer to have ATEN contact you, please complete the form and a representative will be in touch with you shortly

First Name *	
Last Name *	
- Country *	
Company *	
Email *	
Phone Number	
- Customer Type *	
Job Title *	



A/V Out

HDMI



A/V In

HDMI



FIBER



Audio Return Channel



Features

ATEN VE781030 [True 4K](#) HDMI Active Optical Cable utilizes AOC technology that enables conversion between input signals and optical signals for optimum high bandwidth data transmissions. The EMI-resistant optical cables come in 30 m with full support of [True 4K](#) resolutions. It is fully compliant with HDCP 2.2 standards and meets HDMI specifications including 3D, deep color, and data rates up to 18 Gbps. Supported Dolby True HD and DTS-HD Master Audio, the optical cables guarantee lossless audio signal transmissions. The VE781030 optical cable is an ideal solution for extending the reach of your digital signage in a wide range of settings, such as traffic stations, shopping centers, and hospital facilities.

- Supports resolution up to [True4K](#) (4096 x 2160 @ 60Hz 4:4:4)
- HDMI (3D, Deep Color, [True4K_HDR](#), ARC); HDCP 2.2 compliant
- Extends [True4K](#) signals up to 30 m
- Reduced EMI and RFI for lower noise interference
- High data transfer rate of 18 Gbps
- Supports multi audio channel – Dolby TrueHD and DTS-HD Master Audio
- Robust cable pulling strength (Max.10 kg) and compression load resistance (Max.50 kg)
- Plug-and-play

Specifications

Cable Length	30M / 98.4ft
Cable Type	Hybrid type with optical fiber (OM3) and copper wire
Video Input	
Interfaces	1 x HDMI 19-pin Type-A Male
Video Output	
Interfaces	1 x HDMI 19-pin Type-A Male
Video	
Max. Data Rate	18 Gbps (6 Gbps per Channel)
Max. Pixel Clock	600 MHz (Max.)
Max. Resolutions / Distance	Up to 4096 x 2160 / 3840 x 2160 @60Hz (4:4:4) / 30M *Color sub-sampling: 4:4:4 / 4:2:2 / 4:2:0 *Color Depth: 30 / 36 / 48 bit
Compliance	HDMI (3D, Deep Color, 4K, HDR, ARC) HDCP 2.2
Communication	
Signals	TMDS / HDCP 2.2 / EDID / CEC
Audio	
Input	PCM 8-channel, Dolby Digital True HD, DTS-HD Master Audio
Output	PCM 8-channel, Dolby Digital True HD, DTS-HD Master Audio
Conductor	
Construction	7 x Tinned Copper wire strand 4 x OM3 Optical Fiber (50/125um)
Notification	Bend Radius: 20mm (Min.) Compression Load Resistance: Max. 50kg (500N) Cable Filler: Kevlar Cable Marking: ATEN INTERNATIONAL --- HIGH SPEED HDMI HYBRID ACTIVE OPTICAL CABLE 4K@60Hz 18Gbps -- PVC CE EU RoHS EC ZONE/DEVICE * NO external power required
Certifications	
Certifications	Safety and Emission: CE / FCC / RoHS / REACH / UL VW-1 EMC Class-A / Class-B
Power Consumption	DC5.0V:0.25W:0.05ABTU/h Note: ● The measurement in Watts indicates the typical power consumption of the device with no external loading. ● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded.
Jacketed	
Material	PVC (85P) Color: Black
Environmental	
Operating Temperature	0°C to 50°C (32°F to 122°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	0 - 85% RH, Non-Condensing
Physical Properties	
Housing	Connector Case: Zinc Alloy
Weight	0.90 kg (1.98 lb)
Cable Outer Dimension	4.5mm (± 0.2mm)
Carton Lot	5 pcs

Diagram



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