

10M / 20M / 30M / 60M / 100M True 4K HDMI Active Optical Cable

VE7831A / VE7832A / VE7833A / VE7834A / VE7835A

ATEN VE7831A / VE7832A / VE7833A / VE7834A / VE7835A optical cables utilize AOC technology that enable conversion between input signals and output signals for optimum high bandwidth data transmissions. The EMI-resistant optical cables are available in 10, 20, 30, 60, and 100 m with full support of True 4K resolutions. They are fully compliant with HDCP 2.2 standards and meet HDMI specifications including 3D, deep color, and data rates up to 18 Gbps. Supporting Dolby True HD and DTS-HD Master Audio, these optical cables guarantee lossless audio signal transmissions. This cable series comes with an HDMI Ethernet Channel (HEC) to combine audio, video, and data streams into a cable, enabling Internet connection sharing and IP-based applications over HDMI. Plus, it supports Audio Return Channel (ARC), allowing audio signal to travel to and from the TV and audio system, thereby reducing the number of cables between the television and external Home Theatre System or soundbar.

Engineered to meet the latest trend of integrator-friendly design, the VE7831A / VE7832A / VE7833A / VE7834A / VE7835A optical cables feature pluggable gender and gold-plated connectors. Therefore, the cables are ideal solutions for extending the reach of digital signages in a wide range of settings, such as traffic stations, shopping centers, and hospital facilities.





Features

- HDMI (3D, Deep Color, 4K, HDR, HEC, ARC) ; HDCP 2.2 compliant
- Extends True 4K signals 4096 x 2160 @ 60 Hz (4:4:4) up to 100 m
- Supports HDR
- Supports HDMI Ethernet Channel (HEC) combines audio, video, and data streams into a cable to simplify the set-up
- Supports Audio Return Channel (ARC) connects TV and audio system, eliminating the need for an additional cable
- Reduced EMI and RFI for lower noise interference
- 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)
- Additional power source is available via Micro USB cable for better compatibility
- Gold-plated connectors for reliable transmissions
- Compliant with International Flame Retardant Standards : UL CMP-OF (Plenum)
- Pluggable gender for easy installation
- Plug-and-play

Highlights

True 4K / 4K HDR	VE7831A / VE7832A / VE7833A / VE7834A / VE7835A are ATEN's premiere True 4K HDMI Active Optical Cables. Without any compression, these cables can extend lossless True 4K signals up to 100 m. Whether designing Pro AV installations for the aviation industry, military, medical, or other applications, ATEN True 4K HDMI Active Optical Cables deliver the ideal solution to make projects successful.
Supports HEC and ARC	Thanks to the support for HEC and ARC, these cables enable the transfer of Internet signal between connected devices while allowing audio signal transmission between the TV and external audio system.
Pluggable Design	With detachable HDMI connectors, the cable can effortlessly run through a conduit and any other tight spaces, making installation much easier.
Gold-plated Connector	To prevent corrosion on the connectors, ATEN VE7831A / VE7832A / VE7833A / VE7834A / VE7835A cables are equipped with gold-plated connectors.
Reduced EMI & RFI	ATEN VE7831A / VE7832A / VE7833A / VE7834A / VE7835A cables reduce the risk of EMI (electromagnetic interference) and RFI (radio-frequency interference), guaranteeing reliable signal transmission.
Better Compatibility	To increase compatibility, an additional power source is available via Micro USB cables from both sources and displays.



Specifications

	VE7831A	VE7832A	VE7833A	VE7834A	VE7835A			
Cable Length	10 m	20 m	30 m	60 m	100 m			
Cable Type		Cable Type: Hybrid cable with optical fiber and copper wire HDMI Standards: High Speed HDMI Cable						
Video Input			5					
Interfaces		1 x HDMI 19-pin Type-A Male (gold-plated) pluggable connector 1 x HDMI Type-D Male						
Video Output								
Interfaces		1 x HDMI 19-pin Type-A Male (gold-plated) pluggable connector 1 x HDMI Type-D Male						
Video								
Max. Data Rate		18 Gbps (6 Gbps per Channel)						
Max. Pixel Clock		600 MHz (Max.)						
Compliance		HDMI (3D, Deep Color, 4K, HDR, HEC, ARC) HDCP 2.2 Color sub-sampling: 4:4:4 / 4:2:2 / 4:2:0 Color Depth: 30 / 36 / 48 bit						
Max. Resolutions / Distance	Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:4:4) / 10 m	Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:4:4) / 20 m	Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:4:4) / 30 m	3840 x 2160 @ 60Hz	Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:4:4) / 100 m			
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 4 x OM3 Optical Fiber (50/125um)						
Jacketed								
Material		UL Plenum (CMP-OF)						
Certifications								
Certifications		Safety and Emission: CE / FCC / RoHS2 / UL CMP-OF						
Power Consumption	DC5V:0.25W	DC5V:0.25W	DC5V:0.25W	DC5V:0.25W	DC5V:0.25W			
Power (Optional)		Optional power source: Micro USB to USB cable (100 cm) 5V, 250mW (Max)						
Notification		Bend Radius: 20 mm (Min.) Connector Pull Strength: Max. 10 kg (100N) Compression Load Resistance: Max. 50 kg (500N) Shielding & Filling: AL Mylar Shielding / Kevlar Filling						
Environmental								
Operating Temperature		0 – 50 °C						
Storage Temperature		-20 – 70 °C						
Humidity		0 - 85 % RH, Non-Condensing						
Physical Properties								
Housing		Connector Case: Zinc-Alloy						
Weight	0.30 kg	0.30 kg 0.55 kg 0.80 kg 1.62 kg 2.70 kg						
Cable Outer Dimension		Cable Ou	ter Diameter: 4.5 mm	(± 0.2 mm)				

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