

## VE7831A

10M True 4K HDMI Active Optical Cable



ATEN VE7831A 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 10m 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 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

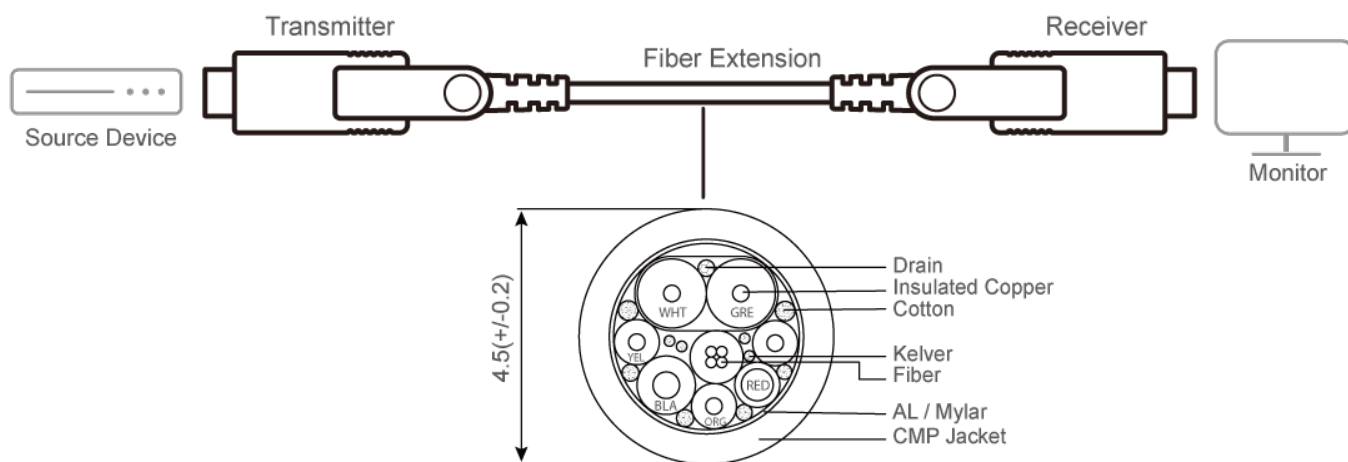
- HDMI (3D, Deep Color, 4K, HDR, HEC, ARC) ; HDCP 2.2 compliant
- Extends True 4K signals 4096 x 2160 @ 60 Hz (4:4:4) up to 10 m
- Supports HDR
- Supports HDMI Ethernet Channel (HEC) – combines audio, video, and data streams into a cable to simplify the set-up
- Supports Audio Return Channel (ARC) – 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

### Specification

|              |                                                                                                      |
|--------------|------------------------------------------------------------------------------------------------------|
| Cable Length | 10M / 32.8 ft                                                                                        |
| Cable Type   | Cable Type: Hybrid cable with optical fiber and copper wire<br>HDMI Standards: High Speed HDMI Cable |
| Video Input  |                                                                                                      |

|                             |                                                                                                                                                                                                                                                   |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interfaces                  | 1 x HDMI 19-pin Type-A Male (gold-plated) pluggable connector<br>1 x HDMI Type-D Male                                                                                                                                                             |
| Video Output                |                                                                                                                                                                                                                                                   |
| Interfaces                  | 1 x HDMI 19-pin Type-A Male (gold-plated) pluggable connector<br>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)<br>HDCP 2.2<br>Color sub-sampling: 4:4:4 / 4:2:2 / 4:2:0<br>Color Depth: 30 / 36 / 48 bit                                                                                                                |
| Max. Resolutions / Distance | Up to 4096 x 2160 / 3840 x 2160 @ 60Hz (4:4:4) / 10m                                                                                                                                                                                              |
| 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<br>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:1BTU/h<br><br>Note:<br>● The measurement in Watts indicates the typical power consumption of the device with no external loading.<br>● The measurement in BTU/h indicates the power consumption of the device when it is fully loaded. |
| Power (Optional)            | Optional power source: Micro USB to USB cable (100cm)<br>5V, 250mW (max)                                                                                                                                                                          |
| Notification                | Bend Radius: 20mm (Min.)<br>Connector Pull Strength: Max. 10kg (100N)<br>Compression Load Resistance: Max. 50kg (500N)<br>Shielding & Filling: AL Mylar shielding / Kevlar Filling                                                                |
| 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                      | 0.30 kg ( 0.66 lb )                                                                                                                                                                                                                               |
| Cable Outer Dimension       | Cable Outer Diameter: 4.5mm (± 0.2mm)                                                                                                                                                                                                             |
| Carton Lot                  | 10 pcs                                                                                                                                                                                                                                            |

Diagram



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