

## Gigalight HDMI2.0 AOC Application

With the increasing popularity of 4K TV, HDMI2.0 interface is also becoming more common. 4K Ultra HD video interface usually has two versions: HDMI1.4 and HDMI2.0. HDMI 1.4 standard was released in 2009, and now it supports a lot of equipment, mainly for the applications with 4K × 2K (3840 × 2160p @ 30 frames or 4096 × 2160p @ 24 frames), digital data per channel is 340mbps, so the total bandwidth is 10.2Gbps; HDMI 2.0 standard was released in September 2013, for the applications with 4K Ultra HD image (2160p) which is 60 frames per second, digital data per channel is 600mbps, so the total bandwidth is 18Gbps.

Standard	Publishing time	Working rate	Digital video format
HDMI1.4	2009	10.2Gbit/s	2160p30
HDMI2.0	2013	18 Gbit/s	(True 4K)

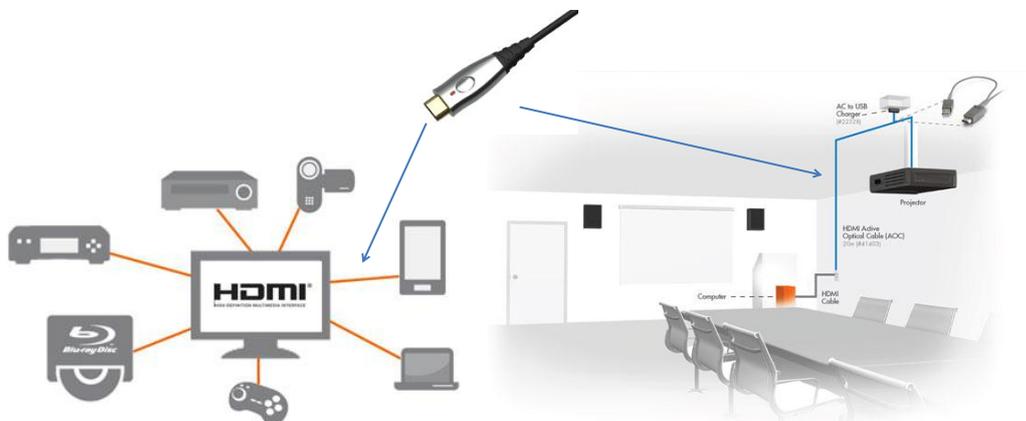
Ordinary HDMI HD copper is limited by the electrical signal attenuation, it is said that the top-quality cable can be up to 5 meters, and cable is vulnerable to external electromagnetic interference. Compared to traditional copper wires, the Gigalight HDMI AOC active optical fiber data cable is longer, thinner and more flexible with better signal quality and without radiation or electromagnetic interference. Compared to other HDMI fiber optic transmission scheme, Gigalight HDMI2.0 AOC active optical fiber cable is easy to use with good compatibility and without the need for external power supply.

### Characteristics of Gigalight HDMI2.0 AOC product

Maximum transmission length of 100 meter

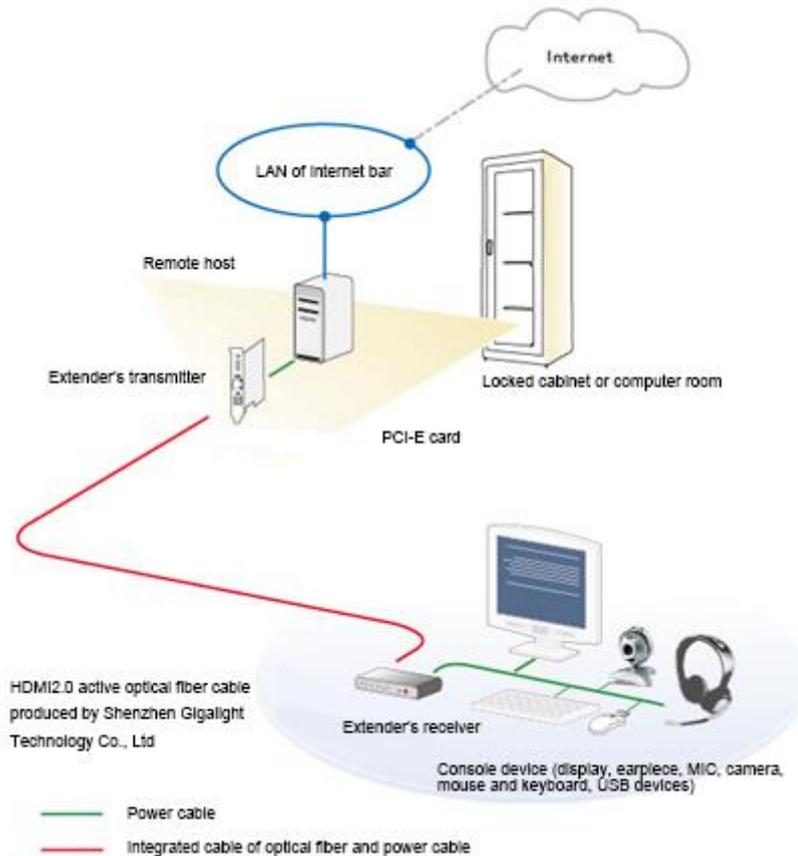
- Support 4K @ 60hz ultra high-definition display
- Compatible with HDMI2.0, and also compatible with HDMI1.4 / HDMI1.3
- Plug and play, without the need for driver
- Not need any external power supply
- The optical cable is lighter and thinner, and its weight and volume is reduced by above 70% compared to traditional copper cable
- With excellent characteristic to resist electromagnetic interference

## 1. HDMI AOC consumer applications



HDMI2.0 HD signal extension application of consumer scene. For example, projector is far away from HDMI2.0 signal source (wifi scheme cannot support HDMI2.0 HD playback bandwidth requirements), and then HDMI2.0 AOC can be used.

## 2. HDMI AOC is applied in KVM extender device, such as a large cafe scene.



The common method of optical fiber extender box in Internet bar is to use HD video HDMI interface, USB2.0 interface and analog audio speaker output of computer host, and conduct hybrid integration and extension for host switching power control signals, to reach the extension of 100 meters and meet the demands of the vast majority of high-end large-scale Internet cafes. HDMI1.4 (2.0) ultra-high definition 4K video interface commonly uses optical fiber cable for extension handling. Gigalight HDMI2.0 active optical cable is a solution with good compatibility, low power consumption and low cost. Using optical fiber to replace copper wire as a high-speed signal transmission medium, compared to traditional copper wire, it can transmit the 4K @ 60HZ ultra-high-definition images to 100 meters without any loss, with excellent characteristic to resist electromagnetic interference, so as to fully meet client demands.

4K and 8K display screen may be extended for 20 meters according to client demands, and then HDMI AOC optical fiber cable should be used.





Optical interconnect technology innovator

深圳市易飞扬通信技术有限公司  
Shenzhen Gigalight Technology Co., Ltd

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