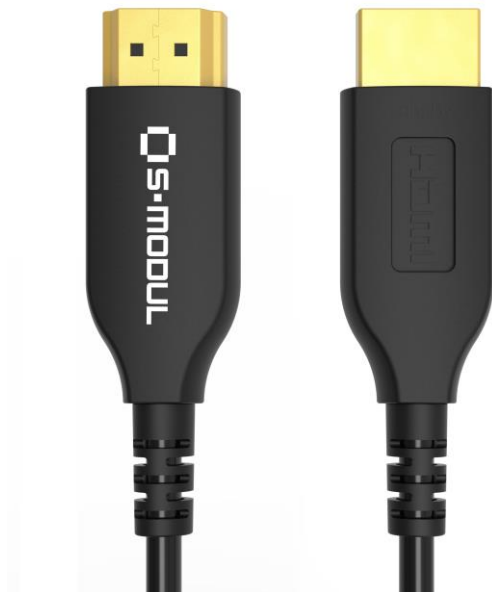




## Features

- Active Optical Cable
- HDMI 2.0 compliant
- 4K60 4:4:4 HDR video support
- Completely immune to RF and electromagnetic interference.
- Cable Length 1-150m
- LSZH compliant
- Plenum-rated Jacket
- Cable OD 3.5mm
- No Power supply required
- ARC Supported

## Compatible with

- Apple TV 4K, MacBook
- Distribution Amplifier, Media Player
- Extender, Converters.
- Gaming Systems, X-BOX One, PlayStation4, PCs and HDMI enabled device

S-MODUL FiHD2.0 series is a HDMI Active Optical Cable (AOC) with high performance, low power consumption and cost effective using optical fiber to replace copper wire as the high-speed signal transmission medium, FiHD2.0 can perfectly transmit 4k@60HZ UHD image up to 150 meters. Compared with the traditional copper wire, FiHD2.0 AOC is much longer, softer, slimmer, with better signal quality and perfect EMI/EMC feature. Compared with other HDMI optical fiber transmission solutions, FiHD2.0 AOC is easy to use, has perfect compatibility, and no external power supply needed, and reliable data transfer with 0% signal loss.

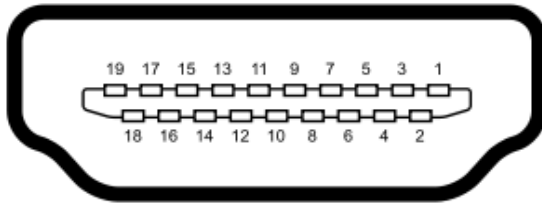
## Product Specification

|                                   |                                                                        |
|-----------------------------------|------------------------------------------------------------------------|
| Max Resolution                    | 4K/60Hz/4:4:4 or HDR at 60Hz                                           |
| Data Rate                         | Up to 18.0 Gbps                                                        |
| Content Protection                | HDCP 2.2                                                               |
| Audio Support                     | HD Multichannel audio up to DTS:X and Dolby ATOMS,                     |
| Color D                           | 1080P: 16bit: 4K                                                       |
| HDR                               | Supports HDR, HLG, HDR10, and Dolby Vision dynamic range picture modes |
| Connector Contact Material        | Nickel or Gold-plated Phosphorous Bronze                               |
| Cable Horizontal Tensile Strength | 800N (180 lbs)                                                         |
| Bulkhead Pulling Force            | 100N/200N (long/short)                                                 |
| Storage Temperature               | -5 to 85C                                                              |
| Operating Case Temperature        | -20 to 60C                                                             |

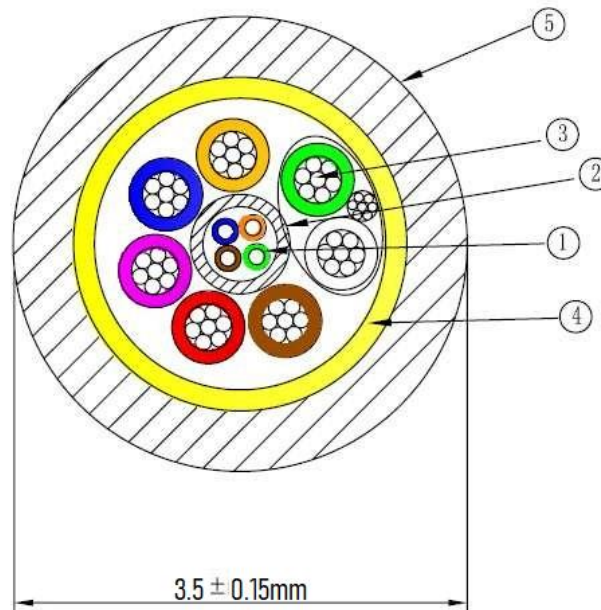
**Table 1. Supported Resolution**

| Common Name                                              | Resolution | Refresh Rate | Color Subsam-pling | Color Depth Per color |
|----------------------------------------------------------|------------|--------------|--------------------|-----------------------|
| 4K                                                       | 3840x2160  | 30P          | 4:4:4              | 8-bit                 |
| 4K                                                       | 4096x2160  | 30P          | 4:2:0              | 16-bit                |
| 4K                                                       | 4096x2160  | 30P          | 4:2:2              | 16-bit                |
| 4K                                                       | 4096x2160  | 30P          | 4:4:4              | 8/12/16-bit           |
| 4K                                                       | 4096x2160  | 60P          | 4:2:0              | 8/12/16-bit           |
| 4K                                                       | 4096x2160  | 60P          | 4:2:2              | 8/12-bit              |
| 4K                                                       | 4096x2160  | 60P          | 4:4:4              | 8-bit                 |
| 4K                                                       | 4096x2160  | 120P         | 4:2:0              | 8-bit                 |
| 8k                                                       | 7680x4320  | 30P          | 4:2:0              | 8-bit                 |
| Video formats below 4K 3840 x 2160/30P are all supported |            |              |                    |                       |

**Figure 1. Type-A Connector Pin Assignment**

|                                                                                      |                   |               |                       |
|--------------------------------------------------------------------------------------|-------------------|---------------|-----------------------|
|  |                   |               |                       |
| <b>Pin 1</b>                                                                         | TMDS Data2+       | <b>Pin 11</b> | TMDS Clock Shield     |
| <b>Pin 2</b>                                                                         | TMDS Data2 Shield | <b>Pin 12</b> | TMDS Clock-           |
| <b>Pin 3</b>                                                                         | TMDS Data2-       | <b>Pin 13</b> | CEC                   |
| <b>Pin 4</b>                                                                         | TMDS Data1+       | <b>Pin 14</b> | Utility/HEAC+         |
| <b>Pin 5</b>                                                                         | TMDS Data1 Shield | <b>Pin 15</b> | SCL                   |
| <b>Pin 6</b>                                                                         | TMDS Data1-       | <b>Pin 16</b> | SDA                   |
| <b>Pin 7</b>                                                                         | TMDS Data0+       | <b>Pin 17</b> | CEC Ground            |
| <b>Pin 8</b>                                                                         | TMDS Data0 Shield | <b>Pin 18</b> | +5 V Power            |
| <b>Pin 9</b>                                                                         | TMDS Data0-       | <b>Pin 19</b> | Hot Plug Detect/HEAC- |
| <b>Pin 10</b>                                                                        | TMDS Clock+       |               |                       |

**Figure 2 Fiber Spec.**



|                           |                                                                                                                       |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 1. Glass Fiber            | Multi-mode fiber, 50/125μm, 850nm<br>fiber cladding non circularity : ≤0.8%<br>concentricity error of cladding : ≤1μm |
| 2. Sheath                 | Round white PVC OD:1.2mm                                                                                              |
| 3. Copper wire            | 28AWG 7C LSZH jacket                                                                                                  |
| 4. Strengthening original | Aramid color (kelver) white/yellow                                                                                    |
| 5. Jacket of cable        | Black LSZH                                                                                                            |

**Table 2. Mechanical**

|                                            |                               |
|--------------------------------------------|-------------------------------|
| Cable Color                                | Black 90                      |
| Cable Diameter                             | 3.5mm                         |
| Bulkhead Dimensions                        | Type-A: 40 mm x 20 mm x 10 mm |
| Fiber Bend Radius/Hybrid cable Bend Radius | 10mm / 35mm                   |
| Length                                     | 10 ~ 150 m                    |
| Cable Weight                               |                               |
| Cable Horizontal Tensile Strength          | 800N (180 lbs)                |
| Connector Contact Material                 |                               |
| Bulkhead Pulling Force                     | 100N/200N (long/short)        |

## Ordering Information

| Part Number       | Length       | Description                      |
|-------------------|--------------|----------------------------------|
| S-MDOULE FiHD 10  | 33ft (10 M)  | HDMI 2.0 Active Optic Cable-10M  |
| S-MDOULE FiHD 15  | 50ft (15 M)  | HDMI 2.0 Active Optic Cable-15M  |
| S-MDOULE FiHD 20  | 66ft (20M)   | HDMI 2.0 Active Optic Cable-20M  |
| S-MDOULE FiHD 30  | 98ft (30M)   | HDMI 2.0 Active Optic Cable-30M  |
| S-MDOULE FiHD 40  | 131ft (40M)  | HDMI 2.0 Active Optic Cable-40M  |
| S-MDOULE FiHD50   | 164ft (50M)  | HDMI 2.0 Active Optic Cable-50M  |
| S-MDOULE FiHD 60  | 197ft (60M)  | HDMI 2.0 Active Optic Cable-60M  |
| S-MDOULE FiHD70   | 230ft(70M)   | HDMI 2.0 Active Optic Cable-70M  |
| S-MDOULE FiHD 80  | 262ft (80M)  | HDMI 2.0 Active Optic Cable-80M  |
| S-MDOULE FiHD 100 | 328ft (100M) | HDMI 2.0 Active Optic Cable-100M |