



Introduction

This WolfPack 4K 60 Hz HDMI Over Fiber Extender is an uncompressed HDMI2.0 4K60 Fiber Extender, the resolution can up to 4096*2016@60Hz 4:4:4, the bandwidth is 18GBPS, the distance can up to 300 meters over one fiber cable, compatible with both single-mode and multi-mode fiber optic cable, the connector is using the LC type.

This WolfPack 4K 60 Hz HDMI Over Fiber Extender is using CWDM technology with 6 wavelength lasers. The data rates of the 1270nm/1290nm/1310nm/1330nm lasers are 6Gb/s, these 4 CWDM lasers transmit the HDMI TMDS signal from TX to RX unit, The 1490nm/1550nm laser data rate is 1.25Gb/s, which transmit the EDID, HDCP2.2, IR, CEC and RS232 bidirectionally.

This 4K60 Fiber Optic extender also supports the HDR and Dolby Vision.

Features

- Using the CWDM Single Fiber Technology.
- With 1270/1290/1310/1330/1490/1550nm DFB lasers inside
- Compliant with HDMI2.0, HDMI1.4, HDCP2.2
- The distance up to 300 meters over one single-mode or OM3 multi-mode Fiber Cable
- Uncompressed resolution 4096x2160@60Hz/4:4:4, 18Gb/s(600M Hz pixel clock);
- 1xLC Fiber Connector;
- Bi-directional RS-232 and IR extension;
- Zero frame delay;
- Supports HDR and Dolby Vision.

Specification

| | Parameter | Specifications |
|-------------------|--------------|---|
| Resolution | 4K60Hz | 4096x2160@ 60Hz (4:4:4) |
| Components | Laser Diodes | 1270/1290/1310/1330nm 10Gb/s CWDM DFB Lasers. |

| | | |
|------------------------|--------------------------------------|--|
| | | 1490nm/1550nm 1.25Gb/s CWDM DFB lasers |
| | Photo Diodes in Rx Module | 1100nm~1620nm PIN Photo Detector |
| | WDM filter | 1270nm/1290nm/1310nm/1330nm/1490nm/1550nm filter |
| Electrical | Input and Output Signals | TMDS Level (complying with HDMI2.0) |
| | Data Transfer Rate (Graphic Data) | Max. 10.0Gbps |
| | Maximum Video Bit Rate | 18Gb/s |
| | Total Jitter at the end of Rx output | Max. 0.6UI |
| | Skew inter-channels | Max. 2ns |
| Optical | Link Power Budget | Min 8dB |
| Mechanical | Module dimension (mm) | 162WX85LX26H |
| Connector | Optical Connector | 1X LC connector |
| | Recommended Fiber Cable | OM3 MM Fiber or Single-mode Fiber |
| Extend Distance | | 300m |

Application Diagram

