KDS-8F is a high-performance, zero latency, 4K@60Hz (4:4:4) video streaming transceiver for streaming via Ethernet over single-mode and multi-mode optical fiber. KDS-8F can be set as either an encoder or decoder. As an encoder, it encodes and streams the HDMI or DisplayPort input along with IR, RS-232, analog audio and USB, over an IP network. As a decoder, it receives the encoded signal and decodes it for output.

**FEATURES**

- **High-Performance Video Streaming Transceiver** - Streams up to 4K@60Hz (4:4:4) resolution signals over a 10G network interface, providing lossless compression
- **Maximum Compatibility** - Fully standard and compliant SDVoE™ codec, enables compatibility with other software and hardware streaming platforms
- **HDCP 2.2 Compliant, HDR Support, Genlock and Fastswitch Modes Support**
- **High-Speed 10G Network Switch** - Managed switch provides multicast, jumbo frames, IGMP snooping and fast leave
- **Analog Audio Embedding** - Provides an unbalanced analog audio port for embedding audio into the streaming signal
- **Bi-directional USB over IP**
- **Bi-directional IR and RS-232 over IP** - Control an IR or serial device located on the decoder side from the encoder and vice versa
- **Video Wall Support**
- **Multiview Support**
- **Easy, Cost-Effective Maintenance** - LED indicators for main power, Tx/Rx mode setting, HDMI/DisplayPort video source detection, USB connection and Tx and Rx transmission enable easy local maintenance and troubleshooting
- **Simple System Management** - Remote system management support to enable quick and efficient remote system and device life-cycle management
## TECHNICAL SPECIFICATIONS

### Inputs
- 1 HDMI: On a female HDMI connector
- 1 DisplayPort: On a female DisplayPort connector
- 1 IR: On a 3.5mm mini jack

### Outputs
- 1 HDMI: On a female HDMI connector
- 1 IR: On a 3.5mm mini jack

### Ports
- 1 SFP+ Fiber: On LC connector(s) for 10GbE Ethernet (MM SFP+ transceiver module included)
- 1 Unbalanced Stereo Audio: On a 3.5mm mini jack
- 1 1GbE Ethernet: On an R–J45 connector
- 1 RS-232: On a 3–pin terminal block connector
- 3 USB: On female USB type−A connectors
- 1 USB: On a USB mini connector

### Video
- Standards Compliance: 10/12–bit HDR (Point–to–Point and Genlock mode only), HDCP 2.2 & 1.4, DVI 1.0,

### Extension Line
- Signal Compression: Ultra–light compression, lossless for most content
- Maximum Range in Point–To–Point Mode Using OM3 multi–mode fiber − 300m (980ft) / Using OM4 multi–mode fiber – 550m (1800ft) / Using single–mode fiber – 30km (18.6 miles)

### Audio
- Standards Compliance: Supports pass–through of audio formats including LPCM 2.0/5.1/7.1, Bitstream and HD Bitstream from HDMI sources

### Power
- Source: 12V DC
- Consumption: 1A

### Accessories
- Included Power adapter, multimode SFP+ transceiver module, rubber feet
- Optional Single–mode SFP+ transceiver module

### Environmental Conditions
- Operating Temperature: 0 to + 45°C (32 to + 113 °F), 10% to 90%, non–condensing
- Storage Temperature: –20 to +70°C (−4 to + 158 °F), 10% to 90%, non–condensing
- Humidity: 10% to 90%, non–condensing