

4 Channel & 16 Channel HD-SDI Extender

4 Channel & 16 Channel Unidirectional HD-SDI Extender over SM Optical Fiber for 20km



Overview

- 4 Channel/16 Channel Unidirectional HD-SDI Extender can simultaneously transmit 4 Channel/16 Channel HD-SDI video over one single-mode optical fiber. Electronic and optical adjustments are never required. LED indicators are provided for instantly monitoring system status. Devices are available for either standalone or rack-mount installation, which is suitable for different working environment.
- 4 Channel/16 Channel Unidirectional HD-SDI Extender adopts the advanced uncompressed HD composite video and high velocity digital optical transmission technologies, which convert the composite signals to optical signals to achieve long distance for the HD CCTV installation.

Benefits

- Plug and Play, Simple Installation
- Industrial Wide Range of Operational
 Temperature
- Automatically Identify Formats of Input
 Videos
- LED Indicators Informs the Functional Mode
- Non-compression Coding Technology

ww.fs.com

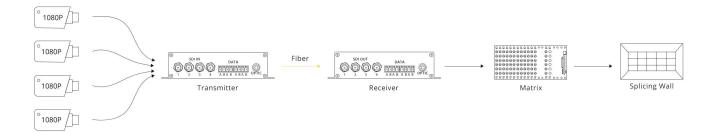


Application

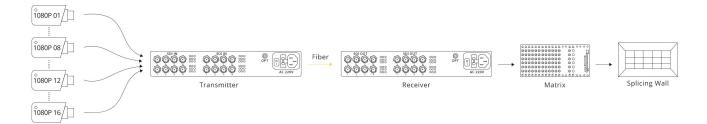
- · City Traffic Monitoring System
- · Public Security, Safe City Monitoring System
- Highway Security Protection, Charging System
- Building, Campus Monitoring Net
- Industrial Monitoring (Airport, Chemical Industrial, Steel, Oil, Railway, Water Conservancy, Mine, etc)
- Military Monitoring (Storehouse, Frontier Defense, Guard, Nation Defense, etc)
- Electric Power, Oilfield, Television Program Transmission System
- Gymnasium (Live Video, Audio Transmission)

Connection Diagram

4 Channel HD-SDI Extender



16 Channel HD-SDI Extender



www.fs.com 2



Technical Specification

4 Channel and 16 Channel Unidirectional HD-SDI Extender come with an outstanding performance and quality. Here's a look at the details.

Characteristics

| | FS3040 | FS3016 | |
|------------------------|---|---|--|
| Optical | | | |
| Fiber Type | Single-mode/Multimode Fiber | Single-mode fiber (9/125um) | |
| Fiber Connector | FC | FC | |
| Distance | 20KM (Single-mode Fiber), 1KM (multimode Fiber) | 20KM (Single-mode Fiber) | |
| Wavelength | CWDM Wave | CWDM Wave | |
| Fiber Power | -9 to +3dBm | -6 to +5dBm | |
| Receiver Sensitivity | -5 to -24dBm | -5 to -24dBm | |
| Video | | | |
| Video Interface Number | 4 Channels | 16 Channels | |
| Physical Interface | BNC | BNC | |
| Tx Input level | >500mVp-p | >500mVp-p | |
| Rx Output level | 1-1.2Vp-p | 1-1.2Vp-p | |
| Bandwidth of Video | 50M (720P) 100M (1080P) | 50M (720P) 100M (1080P) | |
| Differential Phase | ≤ 2 | ≤ 2 | |
| Differential Gain | ≤ 2% | ≤ 2% | |
| Input/Output Impedance | 75 Ω | 75 Ω | |
| Surge Protection | 10/700us:(1-1.5kv) | 10/700us:(1-1.5kv) | |
| Sampling Digit | 10 Bit | 10 Bit | |
| Sampling Frequency | 60Mhz | 60Mhz | |
| Data (Optional) | | | |
| Physical Interface | The Industry Standard Connecting Terminal | The Industry Standard Connecting Terminal | |
| Interface Signal | Optional RS485/RS422/RS232/Manchester | RS485/RS422/RS232/Manchester | |

www.fs.com



Characteristics

| 750010 | | | | |
|------------------------------|--|--|--|--|
| FS3040 | FS3016 | | | |
| | | | | |
| ≤115,200bps | ≤115,200bps | | | |
| < 10 -9 | < 10 -9 | | | |
| Full duplex / half duplex | Full duplex / half duplex | | | |
| Environmental Specifications | | | | |
| -40°C∼+50°C | -40°C∼+50°C | | | |
| -40°C∼+85°C | -40°C∼+85°C | | | |
| 0-95% (No Condensation) | 0-95% (No Condensation) | | | |
| ≥100,000 Hours | ≥100,000 Hours | | | |
| DC 12V | 90VAC-245VAC to 12V | | | |
| | | | | |
| 1 Year | 1 Year | | | |
| | <10-9 Full duplex / half duplex ons -40°C~+50°C -40°C~+85°C 0-95% (No Condensation) ≥100,000 Hours DC 12V | | | |

Ordering Information

| FS P/N | ID NO. | Description |
|----------|---------------|--|
| FS3010MD | #32827 | Mini 1 Channel Unidirectional HD-SDI over Optical Fiber Transmitter and Receiver Set |
| FS3040 | #32623 | 4 Channel Unidirectional HD-SDI over Optical Fiber Transmitter and Receiver Set |
| FS3016 | <u>#32751</u> | 16 Channel Unidirectional HD-SDI over Optical Fiber Transmitter and Receiver Set |

www.fs.com









All statements, technical information, and recommendations related to the products here are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. Please contact FS for more information.