

1、产品简介

该 HD-SDI 光端机设计和生产是适用于电视行业的高可靠、高性能的串行数字光传输设备, 信号格式从 19.4Mbps 到 2.97Gbps, 系统支持符合 SMPTE424M, SMPTE292M, SMPTE259M, SMPTE297M, SMPTE305M, SMPTE310M 标准, 以及 DVB-ASI (EN50083-9) 等数字电视格式的信号, 满足工业级和广电产品相关标准要求。

2、性能特点

- 在单纤上传 1 路单向\双向 3G-SDI 信号
- 工作范围从 19.4Mb/s 到 2.97Gb/s
- 用于 SMPTE 424M (2.97Gb/s) 的时钟恢复
- 自动适应 SDI 143M, 177M, 270M, 360M, 540M, 1483.5M, 1485M, 2970Mbps 速率
- 支持 SMPTE 424M (2.97Gb/s), SMPTE 344M (540Mb/s)、M2S 和 DVB-ASI(270Mb/s) 标准
- 输出光波长范围为 1310nm、1550nm 和高达 16 种 CWDM 波长 (ITU-T G.694.2 兼容)
- 100m 自动电缆均衡, 适用所有在 2.97Gb/s 以下的速率 (Belden 1694A)
- LED 状态指示灯对关键的参数进行监视
- 可选的网管系统
- 支持热插拔
- 可提供独立式、1U 机架式、2.5U 机架式和 4U 机架式安装

3、规格参数

- 串行电视 BNC 输入
- 电视信号标准: SMPTE424M, 292M, 259M, 297M, 305M, 310M, M2S, DVB-ASI, VB-SSI 和 其它的 Telecom/Datacom 速率 (19.4Mb/s - 2.97Gb/s)

- 输入数目: 1 路
- 反射损耗: >15DB

- 均衡: 0-100m @ 2.97Gb/s

连接器: 75Ω BNC

光输出

- 输出数量: 1 ;
- 工作波长: 1310nm / 1550nm ;
- 抖动: < 0.2UI ;
- 串行电视 BNC 输出 (EO/OE) 与输入同
- 信号电平: 800mV 标称
- 过冲: < 10% 振幅
- 抖动: < 0.2UI

线缆传输类型: 单模单纤 (多模可选)

反射损失: > 15dB

连接器: LC/FC/PC (SC/PC 可选)

输出数量: 接收端 2 路输出

上升/下降时间: 200ps 标称

反射损耗: > 15dB

连接器: 75Ω BNC

电气指标

- 工作温度: 0℃ ~ +50℃
- 功率 12 W
- EMI/RFI 符合 FCC Part 15 Class A, EU EMC 指标
- 平均无故障工作时间 > 100000 小时

电压 1A@12VDC

4、应用场合

电视演播 现场转播 高清安防监控 高清视频会议

1. Overview

The product provides customer with the most cost-effective solution for transmission of 1 channel unidirectional SDI/ASI digital video signal, with 1+1 remote input redundancy and 1 local input redundancy optional. It is an easy installation and adjustment free device while providing high quality, real-time video. It is widely used in the field of CCTV, video surveillance, etc.



2. Features

- Transmit 1-channel unidirectional SDI/ASI digital signal
- Support all SMPTE 295M standard, from 19.4Mb/s to 540Mb/s
- Support SMPTE 305M (SDTi)、SMPTE 310M (19.4Mb/s)、SMPTE 344M (540Mb/s)、M2S and DVB-ASI (270Mb/s) standard
- Automatic coaxial input equalization, highest 50m@270Mbps
- No impact of wrong television signal
- System status could be monitored by the power and other parameters LED indicator
- Support hot swap
- 1U rack mount, 2.5U rack mount , 4U rack mount and stand-alone type

3. Specifications

a) Serial TV, BNC input

- Signal: SMPTE 259M A、B、C、D, SMPTE 297M, SMPTE 305M, SMPTE 310M, SMPTE 344M、M2S& DVB-ASI
- Channel: 2-channel (1-channel input, 1-channel ring out)
- Reflection loss: >15DB
- Equilibrium: 0—300m @ 270Mb/s
- Connector: 75Ω BNC

b) Optics

- Number: 1
- Type: single-mode (multimode optional)
- Output power: -5 ~ -10dBm (0 ~ -5dBm for 80km)
- Receiver sensitivity: -26dBm (-30dBm for 80km)
- Wavelength: 1310nm /1550nm
- Reflection loss: > 14dB
- Dithering: < 0.2UI
- Connector: LC /FC/PC (SC/PC optional)

3G/HD/SD-SDI Transceiver/高清光端机

c)Serial TV BNC output

Output number: T-1 or 2-channel ring out, R-1-channel (optional)

Signal level: 800mV nominal

Rise/ fall time: 900ps nominal

Overshoot: < 10% amplitude

Reflection loss: > 15dB

Dithering: < 0.2UI

Connector: 75Ω BNC

Wavelength: 1310nm(1550nm optional)

d)Power and environmental temperature

Operating temperature: 0℃~+50℃

Pressure: 1A@12VDC ,5VDC

Storage temperature: -40~85℃

Operating humidity: 5~95% (no condensation)

Storage humidity: 0~95% (no condensation)

Power: 12W

EMI/RFI: meet FCC Part 15 Class A, EU EMC indication

Average time trouble-free: > 100000 hours

e)Other

Dimension: 117 mm L x 80 mm W x 22 mm

Weight: 0.5KG

EMI/RFI: meet FCC Part 15 Class A, EU EMC indication

4. Ordering information

SDI / ASI digital video fiber optic transmission

KW5010-T

SDI/ASI digital video fiber optic transmitter, SDI/ASI, from 19.4Mb/s to 540Mb/s

1-channel unidirectional signal, 1310nm/1550nm single mode (multimode optional) laser,

-5 ~ -10dBm (0 ~ -5dBm for 80km), Stand-alone & Rack-mountable (Specify LC/FC, PC, SC/PC optional)

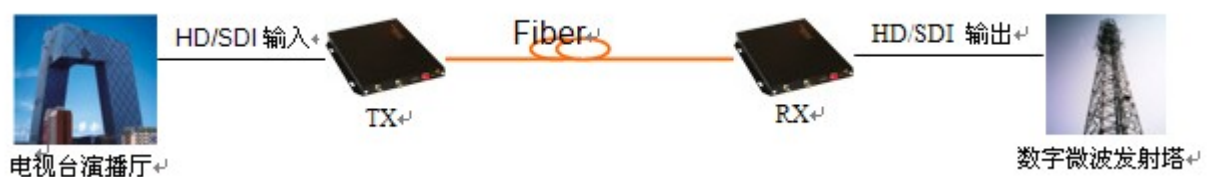
KW5010-R

SDI/ASI digital video fiber optic receiver, 1-channel bidirectional signal, 1310nm/1550nm

single mode (multimode optional) laser, -26dBm (-30dBm for 80km) sensitivity,

Rack-mountable (Specify LC/FC, PC, SC/PC optional)

5. Application Area.



3G/HD/SD-SDI Transceiver/高清光端机



3G/HD/SD-SDI Transceiver/高清光端机

