## FEATURES

· 1 channel video and audio transmission of digital video signal over optic fiber



· Handles pathological pattern

· Automatic cable equalization to ensure signal integrity

· Automatic reclocking    270Mbit/s - 1.48Gbit/s - 3Gbit/s

· Support signal type: 270Mbit/s to 3Gbit/s according to SMPTE 424M, SMPTE 292M and SMPTE 259M standards, DVB-ASI

·Directly compatible with HD-SDI camera systems and support RS-232, RS-422, and RS-485 data protocols

· Long transmission capability at least 10 km(6.2 miles) , up to 80 km

· Terminal block power input for industrial application

·Supports hot swapping and hot plugging

·Simplex LC/PC single mode optical connection

·Industry-grade of operating temperature from -10℃to 75℃ , which is applied to the different working environment

·Stand-alone type or card-type installed in 19'' 2U or 4U rack-mount chassis.
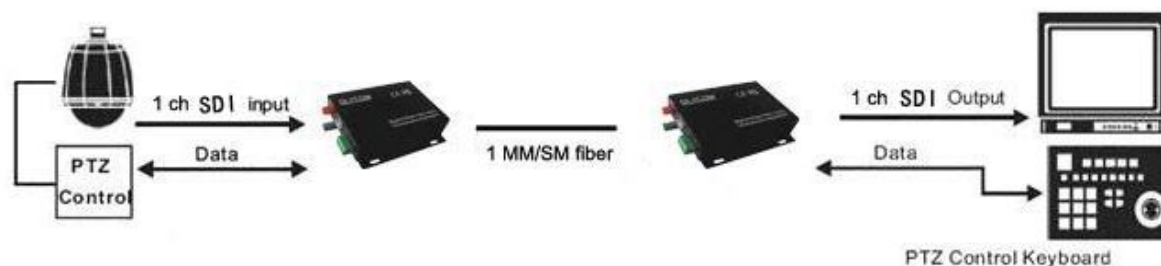
## DESCRIPTION

The VSDI series fiber video converter is an ideal and economic solution for broadcasting or surveillance applications. It receives one HD-SDI electrical input, perfectly converts electrical SDI signal to single mode optic SDI signal. It supports transmission image of SDTV (143-540Mbps), HDTV (1.485Gbps) and HDTV (3Gbps, 1080p60).

Both transmitter and receiver provide equalizing and reclocking at input unit in order to re-construct the signal for consistent quality. Besides, with advanced fiber technology, VSDI can easily pass pathological pattern to prove its complete transmission.

The VSDI series fiber video converter are typically used in applications where the cameras have P/T/Z capabilities. Plug and Play design ensures the ease of installation and operation. 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 .

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## APPLICATION



## SPECIFICATION

### Opitcal：

| Wavelength | 1310nm&1470nm~1610nm |
|---|---|
| Output Power | -10~-3dBm /   -3~+2dBm |
| Optic fiber | 50/125u multimode，62.5/125u multimode，9/125u single mode |
| Rx sensitivity | -18dBm |
| Optical connector | LC、FC、ST (optional) |
| Distance | 0~500M (MM)  /  0~80KM  (SM) |

### Data：

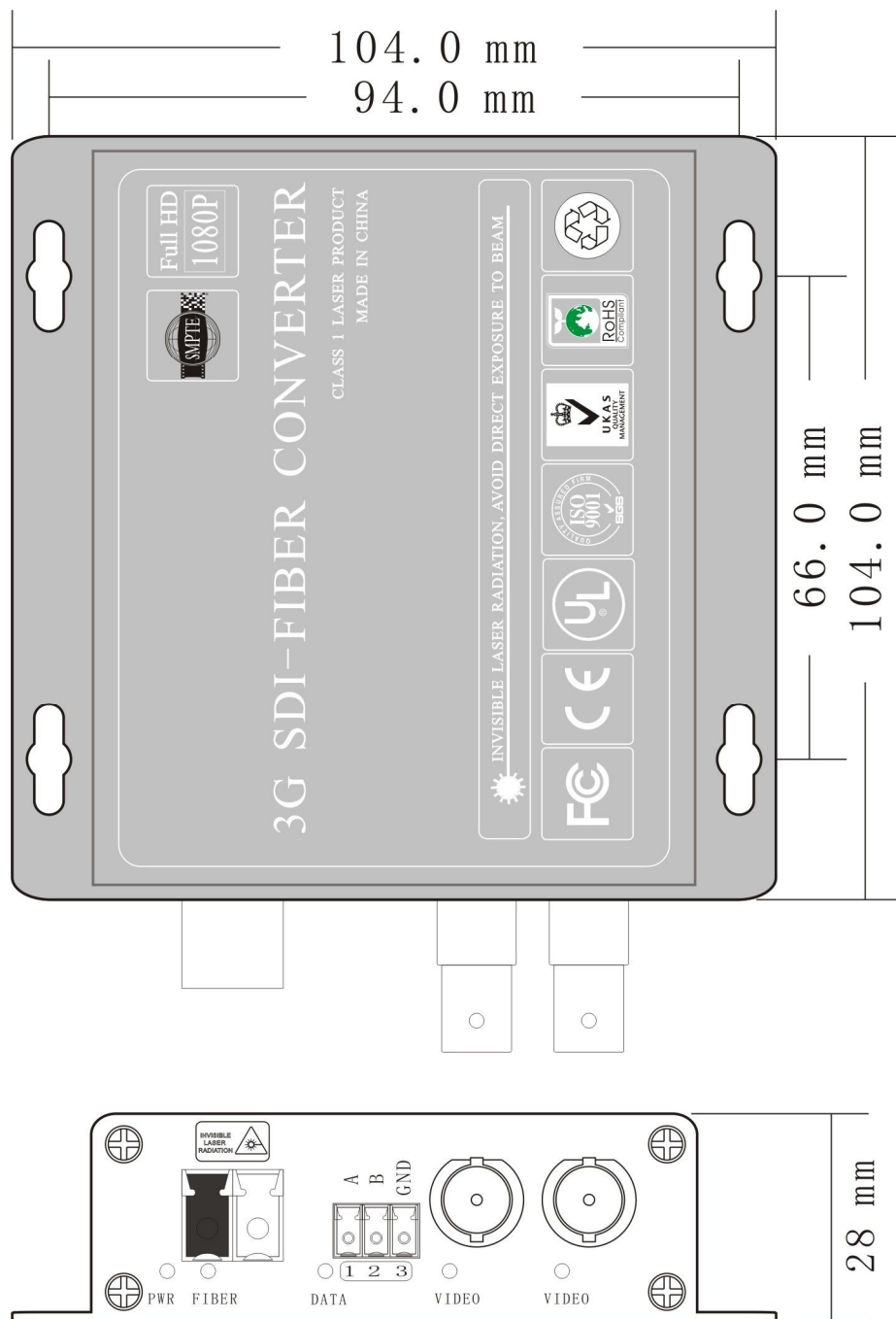| Data protocol | RS232、RS422、RS485、Manchester，BIPHASE data |
|---|---|
| Data rate | 0~200 Kbps |
| Error rate | $< 10^{-9}$ |
| Connector | Standard terminal lead |

### Video:

| SDI Input | |
|---|---|
| Signal Type SDI | SMPTE 424M, SMPTE 292M, SMPTE 259M, DVB-ASI |
| Data Rates | 270Mbit/s - 1.48Gbit/s - 3Gbit/s |
| Cable Equalization | Automatic cable EQ (Belden 1694A cable) |
| | 250m @ 270Mbit/s, 140m @ 1.5Gbit/s, 80m @ 3Gbit/s |
| Connector | BNC 75 Ohm |

### General：

| Input Power | 5 V DC |
|---|---|
| Power consumption (maximum) | Transmitter: 1.8W     Receiver: 1.5W |
| Operating temperature | 0°C to 55°C |
| Storage temperature | -10°C to 70°C |
| Operating humidity | 0 ~ 95% (non-condensing) |
| Net Weight | 310g per pair |
| Case material | Aluminum |

## Dimension

# Digitally Encoded One Channels of Multi-rate HD/SD-SDI Video

**HFB-FO-V-SDI**       **Product Data sheet**       **VER0.1/03**

**Transmitter**



**Receiver**

## Ordering Information

**CSDI** □　　□ □　　□　　-　□　□　　（　- □　）

Data Rate：

5：1.5G

6：3G

7：1.5G/155M

8：3G/155M

T:Tranmiter

R:Receiver

OPTION:

B:Just pcb board,no case

Distance：

1：10KM

2：20KM

4：40KM

8：80KM

Output Power

Normal

wavelength：

08：850nm

13：1310nm

15：1550nm

CWDM

wavelength：

47：1470nm

49：1490nm

51：1510nm

53：1530nm

55：1550nm

57：1570nm

59：1590nm

61：1610nm