4ch one-way video with8ch bi-directional data and 10/100Mbps Ethernet on one optical fiber

HIGHLIGHT

✦ 4ch video with 8ch bi-directional data and 10/100Mbps Ethernet over one single-core fiber

✦ 8/10 bit digital video encoding and uncompressed digital transmission technology

✦ 12VDC/24VAC wide-range power supply

✦ Supports RS-232, RS-422, RS-485 and Manchester data interfaces

✦ Stable picture quality with optional video Auto Gain Control (AGC)

✦ Compatible with PAL 、NTSC or SECAM

✦ Rapid indication of critical operating parameters by LED status indicators

✦ Patent dust-proof structure design

✦ Interchangeable between standalone and 1U/4U rack-mount.

✦ Low power consumption

✦ No in-field electrical or optical adjustment required

✦ Lightning-proof design for all I/O ports

DESCRIPTION

VD2000 series satisfies the demand for highly cost-effective fiber optical transmission products, utilizing a compact design to provide a wide range of services covering Video, Audio, RS-232, RS-422/485, Contact Closure, Telephone, Aiphone, 10/100Mbps Ethernet and E1, with the capacity of up to 256 digitally encoded video channels transmission on one optic fiber.

With the superior dust-proof craft, and the possibility that the stand-alone module can be plugged into the 4U 19'' chassis with redundant power or the 4U 19'' passive chassis, the high durability and flexibility of VD2000 series ensures optimized performance in demanding applications, compliant with all the environmental requirements.

ORDERING INFORMATION

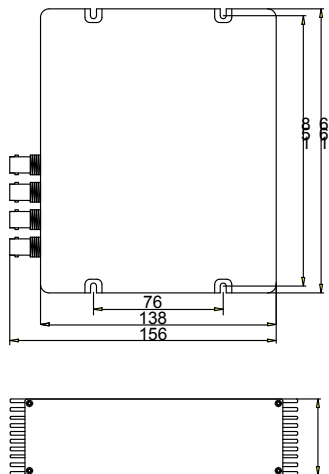| Model	Description
VD2000T-4V8D	Transmitter, Single Mode fiber, 4V+8D
VD2000R-4V8D	Receiver, Single Mode fiber, 4V+8D
VD2000T-4V8D -IP	Transmitter, Single Mode fiber 4V+8D+IP
VD2000R-4V8D –IP-U	Receiver, Single Mode fiber, 4V+8D+IP

Note:

1. "M"=standalone, "U"=rack module, "D="Data, "IP"=100BaseT

2. The 8 data channel can be RS232, RS422/485, Audio, Contact Closure, Telephone etc. Such as 2ch Data+2ch Audio+4ch C.C。

3. The default distance is 0~20km, 40/60/80/100Km for optional.

* The distance is based on the link-loss less than 0.4dB/km@ 1310nm, 0.25dB/km@1550nm.

SPECIFICATIONS

Video

Channels	4
Format	PAL/SECAM/NTSC
Input level	0.5～2Vpp (AGC on)
Output level	1 Vp-p
Bandwidth(-3dB)	8 MHz
Sampling resolution	10bit
Differential gain	< 1.5%
Differential phase	< 1.5°
Group delay	< 50 ns
S/N	>67 dB
Connector type	BNC 75Ω

Data

Channels	8(Max.)
Format	RS-232, RS422, 2 or 4 wire RS485 with Tri-State Manchester-Bi-Phase
Date Rate	DC-115Kbps（NRZ）
Operating Mode	Simplex or full-duplex
Bit Error Rate	$<10^{-9}$
Connector	Terminal Blocks with Screw Clamps

Optial

Wavelength	1310/1550nm 或 CWDM
Fiber Type	SM or MM
Budget (system)	12~30dB
Output power	+3~-12dBm
Receiver Sensitivity	-24dBm
Connector	LC (FC/SC/ST optional)
Fiber Transceiver	SFP or 1X9 Module available
MTBF	>100,000 Hrs

Audio

Channels	0~8(Optional)
In-/output Level	3.5Vp-p
Sampling resolution	24bit
Input Impedance	>50KΩ or 600Ω (bal)
Output Impedance	<50Ω (bal)
Bandwidth	20Hz～20kHz
S/N	>70dB
Tot. Harmonic Distortion	<1%
Connector	Terminal Blocks with Screw Clamps

Ethernet

Bit Rate	10/100Mbps
RJ45 Port	UTP-100Ω, Cat5
Standard	IEEE802.3u, IEEE802.3x

Powering

Stand-alone	0.6A@12VDC
Power Consumption	<6W
Input Voltage	12/24VDC or 24VAC

Mechanical

Stand-alone Size(mm)	156D x 166W x 44H
Rack Mount Size(mm)	156D x 150W x 44H
Stand-alone Weight(kg)	<1.2
Rack Mount Weight(kg)	<1.0

Environmental

Operating Temp.	-40°C to +74°C
Storage Temp.	-40°C to +85°C
Relative humidity	0~95% (non-condensing)

SIZE (mm)

APPLICATIONS

4 Video in
Audio in/out
Contact in/out
Data in/out

4 Video out
Audio in/out
Contact in/out
Data in/out