Model:

VDS2838-E-T

VDS2838-E-R

Description

The VDS2838-E model provides for the simultaneous transmission of 4 video signals, 8 audio signals, 7 data signals and Ethernet over one multimode or single mode optical fiber. The use of 10-bit video sampling provides extremely high video quality. DIP selectable RS-232, RS-422, RS-485 2-wire or 4-wire, Manchester or Bi-phase and contact closure signal. The modules are available in either stand-alone or rack mount versions.

CHANNEL AVAILABILITY

(Specify at time of order)	Forward Path	Reverse Path
Number of Video	0 to 8	
Number of Audio	0 to 8	0 to 8
Number of Data	0 to 3	0 to 3
Number of Ethernet	1	1

Features

• 8-channel video with 8-channell audio, 3–channel data and Ethernet transmitters and receivers

• 10 bit uncompressed digital video

• 24 bit digitally encoded audio

• Factory default setting RS-232 data protocol, DIP selectable RS-422, RS-484 2-wire or 4-wire,
  Manchester or Bi-phase and contact closure

• Video input with AGC (Automatic gain control)

• Anti-lightning chips on both Video and Data interface

• No In-field Electrical or Optical Adjustments Required

• NTSC, PAL, SECAM auto compatible

• Power, Video Presence, Data In/Out, and Fiber Status Indicating LED's to Monitor System Performance

• Hot swappable rack-mount cards

• 12 VDC or 24 VAC power supply

• Industry standard connectors

Ordering information

Models	Wavelength	Fiber Type	MAX. Distance
VDS2838-E-MT VDS2838-E-MR	1310/1310nm	MM	2Km
VDS2838-E-MT VDS2838-E-MR	1310/1550nm	SM	20km (40/60/80km optional)

*Optical transmission distance is limited to optical loss of the fiber and additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth. **For 50/125 Fiber, subtract 4 dB from optical power budget.

FC CE ISO 9001 SGS UKAS

The management system governing the manufacture of this product is ISO 9001:2000 certified.

Video, audio and data fiber optic transmission system

VADSYS
VIDEO
AUDIO
DATA
SYSTEM

Specifications

Video (X8)

Video format	PAL/ NTSC/SECAM
Video Input	0.5 2Vpp
Video Output	1Vp-p
Bandwidth (-3 dB)	8 MHz
Encoding	10bit
Differential gain	≤1%
Differential phase	≤1°
SNR	≥63 dB
Connector type	BNC 75Ω

Audio (X8)

Input/output level	2Vp-p
Total harmonic distortion	≤1%
Bandwidth (-3 dB)	20~15KHz
Encoding	24bit
Input/output impedance	600Ω or 100KΩ
SNR	≥70 dB
Connector type	Terminal Block with Screw Clamps
Ethernet Rate	10/100Mbps

Data (X3)

Data Protocol	RS-232, RS-422, 2 or 4-wire RS-485 and Manchester
Data rate	DC to 115 Kbps
Data Rate:	$<10^{-9}$
Connectors	Terminal Block with Screw Clamps

Power/Environmental

Stand-alone	6W
Rack-mount	6W
Power adaptor	220VAC to 12VDC/1A
Operating temperature	-40°C to +70°C
Relative humidity	< 95% (non-condensing)
MTBF	>100,000 Hrs

Optical

Wavelengths	1310/1550nm
Fiber type	SM/MM
Budget (system)	12dB
Output power	–5 ~ –10dBm
Receiver Sensitivity	-24dBm
Connector type	FC (SC or ST optional)

Mechanical

Stand-alone Dimensions (mm)	260L x 205W x 45H
Rack-mount Dimensions (mm)	260L x 173W x 40H
Stand-alone Weight (kg)	2.5
Rack-mount Weight (kg)	1.5

System Design

8 Video in

8 Video out

8 Audio in/out   VDS2838-E-T   VDS2838-E-R   8 Audio in/out

3 Data in/out   3 Data in/out