ECT133

ONE CHANNEL VIDEO WITH TWO DUPLEX RS-232 DATA CHANNELS OPTICAL LINK



Video	Data
1	2
\rightarrow	\leftrightarrow

ECT133 system provides high performance link for transmitting unidirectional composite video channel along with two bi-directional RS-232 data channels over one or two fibers. The system features CCTV professional video quality and high speed RS-232 data transfer capability.

ECT133 utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

ORDERING INFORMATION

133**E**-VT/DX-M**YZ** – video TX/RS-232 data TRX module 133**E**-VR/DX-M**YZ** – video RX/RS-232 data TRX module TX - transmitter, RX – receiver, TRX - transceiver

- E = M for multimode 850 nm/TX
 - = M(13) for multimode 1300 nm/TX
 - = **S** for single mode 1310 nm/TX
 - = **S(15)** for single mode 1550 nm/TX
- Y = 1 for single fiber system
 - = 2 for dual fiber system
- Z = ST, FC, SC for optical connectors

Note: The specifications are subject to change without notice.

FEATURES

- □ CCTV Professional Video Quality
- Balanced Video Input
- Compatible with NTSC, PAL and SECAM Transmission
- ☐ High Speed Duplex RS-232 Data Ports
- Multimode and Singlemode Versions
- Power and Signal Status Indicators

Operating Wavelength	850 nm	1300 nm	1310/1550 nm
Optical Core Diameter	50μ/62.5μ		8/10µ
Optical Power Source	VCSEL	LED	Laser
Optical Power Output*	-7 dBm	-14 dBm	-8 dBm
Video Receiver Sensitivity	-30 dBm	-34 dBm	-36 dBm
Video Receiver Sensitivity**	-29 dBm	-33 dBm	-35 dBm
Data Receiver Sensitivity	-32 dBm	-35 dBm	-37 dBm
Data Receiver Sensitivity**	-31 dBm	-34 dBm	-36 dBm
Optical Connectors	ST, SC		FC, ST, SC

^{*} with +/- 1 dBm variation; higher power laser sources are available per special request:

^{**} for one-fiber configuration with internal WDM

Video Bandwidth @ 3 dB	7 MHz		
Video Input Impedance	75 Ohm balanced		
Video Output Impedance	75 Ohm unbalanced		
Video Input / Output Level	NTSC: 1.0 Vp., PAL: 1.3 Vp.(+1/-3 dB)		
Video Input Overload	Up to 3 Vp.		
Signal-to-Noise Ratio	62 dB*		
Diff. Gain (-20°C to +70°C)	< 4 %		
Diff. Gain (-30°C to +85°C)	< 7 %		
Diff. Phase (-20°C to +70°C)	< 4 °		
Diff. Phase (-30°C to +85°C)	< 7°		
Field Tilt	< 2 %		
Luminance Non-Linearity	< 4 %		
(-20°C to +70°C)			
Luminance Non-Linearity	< 7 %		
(-30°C to +85°C)			
Data Interface	RS-422		
Data Rate	Up to 200 Kb/s		
Bit Error Rate	10 ⁻⁹		
Power Requirements	11 – 14 VAC/VDC @ 300mA		
	21 - 27VAC @ 200mA		
Operating Temperature	-30°C to +85°C (-22°F to +185°F)		
Module Dimensions	6.7"(170mm) x 4.95"(126mm) x		
	1.32"(34mm)		

^{*} measured as per RS-250C @ 100m for multimode and 1km for single mode optical cable.

