

## ECT233H DUAL VIDEO WITH FOUR DUPLEX RS-232 DATA CHANNELS DIGITAL OPTICAL RECEIVER



|       |      |
|-------|------|
| Video | Data |
| 2     | 4    |
| →     | ↔    |

ECT233H system provides high performance link for receiving dual unidirectional composite video channel along with four bi-directional RS-232 data channels over two or four fibers. The system features broadcast video quality providing 10-bit video processing with uncompressed digital transmission. ECT233H utilizes high speed analog-to-digital and digital-to-analog conversion with 10-bit resolution, digital signal processing, time division multiplexing, fibre optic transmission at a data rate of up to 1400 Mbit/sec and high speed RS-232 data transfer capability.

### ORDERING INFORMATION

233HE-VR/DX-CYZ – 2 x Video Rx/data TRx card  
 233HE-VR/DX-MYZ – 2 x Video Rx/data TRx module  
 Rx – receiver, TRx – transceiver

- E = M for multimode 2 fiber or 850nm/4 fiber
- = S for single mode 2 fiber or 1310nm/4 fiber
- = S(15) for single mode 1550nm/4 fiber
- Y = 2 for dual fiber system
- = 4 for four fiber system
- Z = ST, FC for optical connectors

### FEATURES

- Broadcast Video Quality
- 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 | 1310/1550nm |
|------------------------|-----------|---------|-------------|
| Optical Core Diameter  | 50μ/62.5μ |         | 8/10μ       |
| Optical Power Source   | VCSEL     | LED     | Laser       |
| Optical Power Output*  | -3 dBm    | -14 dBm | -3 dBm      |
| Receiver Sensitivity   | -31 dBm   | -34 dBm | -34 dBm     |
| Receiver Sensitivity** | -29 dBm   | -32 dBm | -32 dBm     |
| Optical Connectors     | ST        |         | FC, ST      |

\* with +/- 1 dBm variation; higher power laser sources are available per special request;

\*\* for one-fiber configuration with internal WDM.

|                              |  |
|------------------------------|--|
| Video Bandwidth @1dB*        | 7 mHz                                    |
| Video Conversion             |  |
| Resolution                   | 10 bit                                   |
| Video Output                 | 75Ω unbalanced                           |
| Video Output Level           | NTSC: 1.0 V p-p, PAL: 1.3 V p-p          |
| Signal-to-Noise Ratio**      | 64 dB                                    |
| Differential Gain            | < 0.5 %                                  |
| Differential Phase           | < 0.5 °                                  |
| Field Tilt                   | < 0.5 %                                  |
| Luminance Non-Linearity      | < 0.5 %                                  |
| Data Interface               | RS-232                                   |
| Data Rate                    | Up to 1.6 Mb/s                           |
| Bit Error Rate               | 10 <sup>-9</sup>                         |
| Power Requirements           | 11 - 14 VDC @ 600 mA                     |
| Operating Temperature        | -30°C to +70°C (-22°F to +158°F)         |
| Dimensions (w/o connectors)  | 11.6"(270mm) x 5.2"(132mm) x 1.05"(27mm) |
| Dimensions (with connectors) | 12.5"(318mm) x 5.2"(133mm) x 1.06"(27mm) |

\* higher video bandwidth (up to 25 MHz) is available per special request;

\*\* measured as per RS-250C @ 4km, 8-9μ cable.

