

## ECT155H

## ONE VIDEO WITH RS-485 DATA CHANNEL DIGITAL OPTICAL LINK



| Video | Data |
|-------|------|
| 1     | 1    |
| →     | ↔    |

ECT155H system provides high performance link for transmitting unidirectional composite video channel along with one RS-485 data channel over one or two fibers. The system features broadcast video quality providing 10-bit video processing with uncompressed digital transmission. ECT155H 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-485 data transfer capability.

### ORDERING INFORMATION

155HE-VT/DXN-MYZ – video TX/data TRX module  
 155HE-VR/DXN-MYZ – video RX/data TRX module  
 TX - transmitter, RX – receiver, TRX - transceiver

**E** = **M** for multimode 850 nm/TX  
 = **S** for single mode 1310 nm/TX  
 = **S(15)** for single mode 1550 nm/TX

**N** = **2, 4** for number of wires

**Y** = **1** for one fiber system  
 = **2** for dual fiber system

**Z** = **ST, FC, SC** for optical connectors

### FEATURES

- ❑ Broadcast Video Quality
- ❑ Compatible with NTSC, PAL and SECAM Transmission
- ❑ High Speed RS-485 Data Port
- ❑ Two and Four Wire Interface
- ❑ Multimode and Singlemode Versions
- ❑ Power and Signal Status Indicators

| Operating Wavelength         | 850 nm    | 850/1300 nm | 1310/1550 nm |
|------------------------------|-----------|-------------|--------------|
| Optical Core Diameter        | 50µ/62.5µ |             | 8/10µ        |
| Optical Power Source         | VCSEL     | LED         | Laser        |
| Optical Power Output*        | -3 dBm    | -14 dBm     | -3 dBm       |
| Video Receiver Sensitivity   | -30 dBm   |             | -33 dBm      |
| Video Receiver Sensitivity** | -28 dBm   |             | -31 dBm      |
| Data Receiver Sensitivity    | -33 dBm   | -36 dBm     | -36 dBm      |
| Data Receiver Sensitivity**  | -31 dBm   | -34 dBm     | -34 dBm      |
| Optical Connectors           | ST, SC    |             | ST, SC, FC   |

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

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

|                             |   |
|-----------------------------|---|
| Video Bandwidth @ 2 dB*     | 10 MHz                                    |
| Video Conversion Resolution | 10 bit                                    |
| Video Input                 | 75 Ohm balanced                           |
| Video Output                | 75 Ohm unbalanced                         |
| Video Input/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-485                                    |
| Data Rate                   | Up to 1 Mb/sec                            |
| Bit Error Rate              | 10 <sup>-9</sup>                          |
| Power Requirements          | 11 - 14 VDC @ 350mA<br>21 - 27VAC @ 250mA |
| Operating Temperature       | -30°C to +70°C (-22°F to +158°F)          |
| Module Dimensions           | 6.7"(170mm) x 4.95"(126mm) x 1.32"(34mm)  |

\* higher video bandwidth (up to 26 MHz) is available per special request;

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

**Note:** The specifications are subject to change without notice.



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