## **ECT255**

## DUAL VIDEO WITH TWO RS-485 DATA CHANNELS FM OPTICAL RECEIVER



| Video         | Data              |
|---------------|-------------------|
| 2             | 2                 |
| $\rightarrow$ | $\leftrightarrow$ |

ECT255 system provides high performance link for receiving of two unidirectional composite video channels along with two bi-directional RS-485 data channels over two or four fibers. The system features CCTV professional video quality and high speed RS-485 data transfer capability. ECT255 utilizes linear frequency demodulation and very low noise reception technology to assure high quality and stability.

## ORDERING INFORMATION

255**E**-VR/DX**N**-C**YZ** – 2 x Video Rx/RS-485 data TRX card 255**E**-VR/DX**N**-M**YZ** – 2 x Video Rx/RS-485 data TRX module 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
- N = 2, 4 for number of wires
- Y = 2 for single fiber system (1 fiber per channel)
  - = 4 for dual fiber system (2 fiber per channel)
- Z = ST, SC, FC for optical connectors

## **FEATURES**

- CCTV Professional Video Quality
- Compatible with NTSC, PAL and SECAM Transmission
- □ High Speed RS-485 Data Ports
- □ Two and Four Wire Interface
- □ Multimode and Singlemode Versions
- ☐ 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 & Data Receiver | -31 dBm   | -33 dBm | -35 dBm    |
| Sensitivity           |           |         |            |
| Video & Data Receiver | -30 dBm   | -32 dBm | -34 dBm    |
| Sensitivity**         |           |         |            |
| Optical Connectors    | ST, SC    |         | FC, ST, SC |

<sup>\*</sup> with +/- 2 dBm variation @ -30 ℃ to +85 ℃; higher power laser sources are available per special request;

<sup>\*\*</sup> for one-fiber configuration with internal WDM

| Video Bandwidth @ 3 dB       | 7 MHz                                  |
|------------------------------|--|
| Video Output                 | 75 Ohm unbalanced                      |
| Video Output Level           | NTSC: 1.0 Vp., PAL: 1.3 Vp. (+1/-3 dB) |
| 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 %                                  |
| Data Interface               | RS-422                                 |
| Data Rate                    | Up to 200 Kb/s                         |
| Bit Error Rate               | 10- <sup>9</sup>                       |
| Power Requirements           | 11 - 15 VDC @ 400mA                    |
| Operating Temperature        | -30°C to +85°C (-22°F to +185°F)       |
| Dimensions                   | 11.6"(295 mm) x 5.2"(132 mm) x         |
| (w/o connectors)             | 1.05"(27 mm)                           |

<sup>\*</sup> measured as per RS-250C @ 100m for multimode and 1km for single mode optical cable.

Note: The specifications are subject to change without notice.

