

ECT114 ONE CHANNEL VIDEO WITH ONE TTL/CMOS & ONE RS-422 DUPLEX DATA CHANNELS OPTICAL LINK



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|-------|------|
| Video | Data |
| 1 | 2 |
| → | ↔ |

ECT114 system provides high performance link for transmitting unidirectional composite video channel along with one TTL/CMOS & one RS-422 bi-directional data channels over one or two fibers. The system features CCTV professional video quality and high speed data transfer capability. ECT114 utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

ORDERING INFORMATION

114E-VT/DX-MYZ – video TX/data TRX module
 114E-VR/DX-MYZ – video RX/data TRX module
 TX - transmitter, RX – receiver, TRX - transceiver

E = M for multimode 850nm/TX
 = M(13) for multimode 1300nm/TX
 = S for single mode 1310nm/TX
 = S(15) for single mode 1550nm/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 TTL/CMOS & RS-422 Data Ports
- ❑ Multimode and Singlemode Versions
- ❑ Power and Signal Status Indicators

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|--|-----------|---------|--------------|
| 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 Sensitivity | -31 dBm | -33 dBm | -35 dBm |
| Video & Data Receiver Sensitivity** | -30 dBm | -32 dBm | -34 dBm |
| Optical Connectors | ST, SC | | FC, ST, SC |

*With +/-2 dBm variation @ -30 °C to +85 °C; higher power laser sources are available per special request.

** for one-fiber configuration with internal WDM

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|---|---|
| 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 Vpeak. |
| 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 (-20°C to +70°C) | < 4 % |
| Luminance Non-Linearity (-30°C to +85°C) | < 7 % |
| Data Interface | RS-422 |
| Data Rate | Up to 200 Kb/s |
| Bit Error Rate | 10 ⁻⁹ |
| Power Requirements | 11 – 14 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.

