

ECT144

ONE CHANNEL VIDEO WITH TWO DUPLEX
RS-422 DATA CHANNELS OPTICAL LINK

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

ECT144 system provides high performance link for transmitting unidirectional composite video channel along with two bi-directional RS-422 data channels over one or two fibers. The system features CCTV professional video quality and high speed RS-422 data transfer capability.

ECT144 utilizes linear frequency modulation and very low noise transmission technology to assure high quality and stability.

ORDERING INFORMATION

144E-VT/DX-MYZ – video TX/RS-422 data TRX module
144E-VR/DX-MYZ – video RX/RS-422 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

FEATURES

- ❑ CCTV Professional Video Quality
- ❑ Balanced Video Input
- ❑ Compatible with NTSC, PAL and SECAM Transmission
- ❑ High Speed Duplex RS-422 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 & 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 variation +/- 2 dBm @ -20 °C to +70 °C and +/- 3 dBm @ -30 °C to +85 °C;
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 (-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 – 27 VAC @ 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) |

Note: The specifications are subject to change without notice.

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



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