OPTICAL SYSTEMS DESIGN

INDUSTRIAL & DATA TRANSCEIVERS AND MULTIPLEXERS

OSD157 RS232/RS422 TRANSCEIVER/MULTIPLEXER

APPLICATIONS

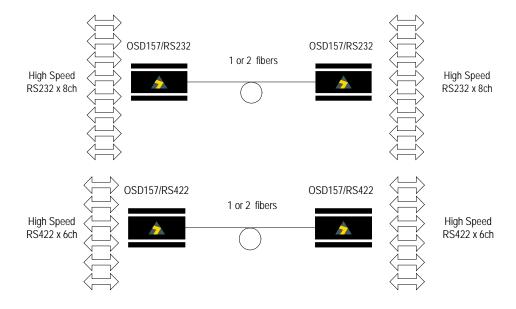
- Military communications
- Secure networks
- Very high speed RS232 or RS422 links
- Computer to terminal cluster communications

FEATURES AND BENEFITS

- Factory configurable for either eight unbalanced signals or six balanced signals
- All signals are totally independent of each other
- ▲ Signals may operate at any speed from DC to 150kbps
- Small EMI/RFI resistant metal enclosure



- Also available as a card to plug into OSD370 19" rack mounting chassis
- Safe transmission in hazardous environments
- ▲ More secure than copper cables
- ▲ Small size, low cost, robust and reliable



TYPICAL APPLICATION DESIGN

ORDERING INFORMATION

RS2
RS42
1310
stand

RS232 Transceiver RS422 Transceiver 1310nm Singlemode Version standalone module format



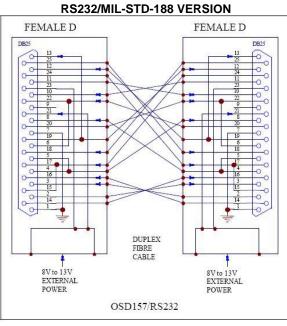
PERFORMANCE

Data Rate	DC to 150kbps Sampling rate on each line: 819kHz
Optical Transmit Power	-17 to -12dBm into 62.5/125 multimode fiber -20 to -12dBm into singlemode fiber (OSD157L only)
Receiver Sensitivity	<-33dBm
Optical Link Budget	>16dB at 850nm (>4km of multimode fiber) >13dB at 1310nm (>25km of singlemode fiber)
Receiver Saturation	>-10dBm
Optical Wavelength	850nm nominal (1310nm for OSD157L version)
Optical Connector	ST standard
Electrical Connector	25 pin female D subminiature
Electrical Configuration	DCE
Electrical Interface	RS232C/V24 with output peak voltage between ±4 and \pm 6V or RS422
Power	+8 to +13VDC @ 150mA supplied by external power supply, or via pin 9 on the D connector on the RS232 version
Indicator	Link OK
Dimensions of Module (mm) Weight of Module Dimensions of Card Weight of Card Operating Temperature Relative Humidity	104W x 144D x 25H 400g 25W x 208D x 100H 200g -20 to +75°C 0 to 95% non-condensing

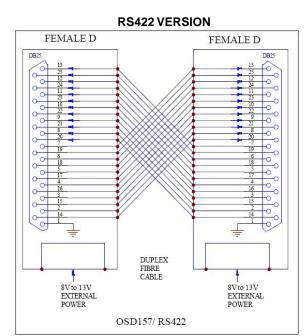
Chassis Current Consumption (CCC)

0.15 Amp

D CONNECTOR PIN ASSIGNMENTS



RS232 VERSION OF THE OSD157



RS422 VERSION OF THE OSD157

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