

# **INDUSTRIAL & DATA TRANSCEIVERS AND MULTIPLEXERS**

## **OSD156 SYNCHRONOUS RS232 TRANSCEIVER**

#### **APPLICATIONS**

- Secure communications
- ▲ Long distance synchronous or asynchronous RS232 links
- Hazardous environments
- Links requiring transfer of control lines
- ▲ Terminal cluster to computer links

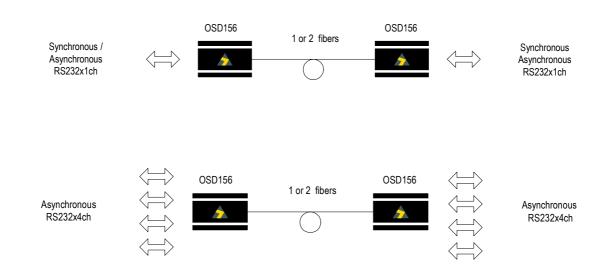




#### **FEATURES AND BENEFITS**

- Small EMI/RFI resistant metal enclosure plugs onto the back of the computer or terminal
- Safe transmission in hazardous environments
- Full duplex asynchronous transmission of
  - 1 data signal at up to 300kbps
  - 3 control signals at up to 80kbps

#### TYPICAL APPLICATION DESIGN



## **ORDERING INFORMATION**

OSD156 Fiber Optic RS232 Transceiver, compact module

OSD156L Singlemode Fiber Optic RS232 Transceiver, compact module

OSD156MB Wall mounting bracket for compact module



## **SPECIFICATIONS**

#### **PERFORMANCE**

Data Rate DC to 300kbps on Data (I/P: Pin 2, O/P: Pin 3)

DC to 80kbps on Controls (I/P: Pins 4, 20, 24; O/P: Pins 5/8, 6, 15/17)

Pulse Distortion <1µS on Data signal

<4µS on each Control signal

Optical Transmit Power -20 to -14dBm into multimode fiber (OSD156)

-20 to -13dBm into singlemode fiber (OSD156L)

Receiver Sensitivity <-43dBm

Optical Link Budget >23dB at 850nm for OSD156 (>6km of multimode fiber)

>23dB at 1310nm for OSD156L (>60km of singlemode fiber)

Receiver Saturation >-10dBm

Optical Wavelength 850nm nominal (1310nm for the OSD156L)

Optical Connector ST standard

Optical Signal Loss Indicator LED is green with good signal and red with too low an optical signal

Electrical Connector 25pin Male D-Subminiature Power Connector 1.3mm socket on side of case

Power +8 to + 13VDC @ 150mA supplied by external power supply or

via pin 9 of the D connector

OR

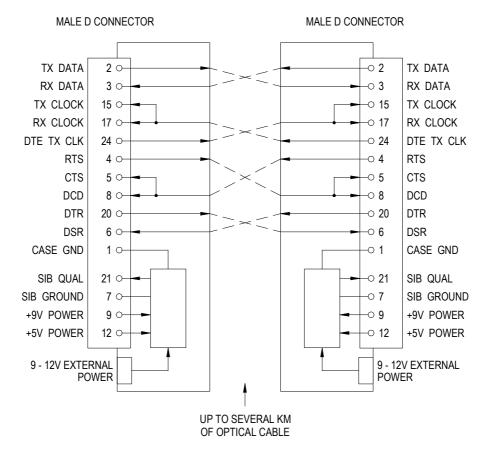
4.75 to 5.25VDC supplied via pin 12 of the D connector

Dimensions (mm) 15H x 44W x 80D (excluding optical connectors)

Operating Temperature -20 to +75℃

Relative Humidity 0 to 95% non-condensing

### **D CONNECTOR PIN ASSIGNMENTS**



Doc ID: 10215605