

INDUSTRIAL & DATA TRANSCEIVERS AND MULTIPLEXERS

OSD136 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







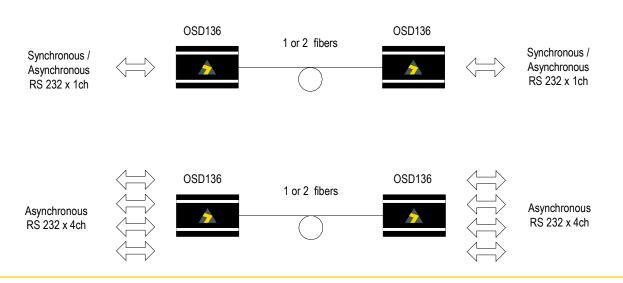
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FEATURES AND BENEFITS

- ▲ Full duplex synchronous or asynchronous data transmission at up to 20kbps
- Small EMI/RFI resistant metal enclosure plugs onto the back of the computer or terminal
- Safe transmission in hazardous environments

- More secure than copper cables
- Small size, low cost, robust and reliable
- ▲ Can be used as a 4-channel RS232 multiplexer
- No user adjustments

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD136	Fiber Optic RS232 Transceiver, small module (shown in photo above)
OSD136L	Singlemode Fiber Optic RS232 Transceiver, compact module
OSD136MB	Wall mounting bracket for small module
Option C	Wall mountable module (for 1-fiber versions only) (not shown)
Option /100	Card version
Option WA	Singlemode single fiber operation (TX @ 1310nm, Rx @ 1550nm) (for Option LC & Option L/100 only)
Option WB	Singlemode single fiber operation (TX @ 1550nm, Rx @ 1310nm) (for Option LC & Option L/100 only)
Option WA	Multimode single fiber operation (TX @ 850nm, Rx @ 1310nm) (for Option C & Option /100 only)
Option WB	Multimode single fiber operation (TX @ 1310nm, Rx @ 850nm) (for Option C & Option /100 only)



SPECIFICATIONS

Data Rate DC to 20kbps asynchronous or synchronous

Optical Transmit Power -20 to -14dBm into 62.5/125 multimode fiber

-20 to -13dBm into singlemode fiber (OSD136L or OSD136LC variants only)

Receiver Sensitivity <-43dBm

<-42dBm for WA or WB single fiber variants

Optical Link Budget >23dB at 850nm for standard OSD136 (>6km of multimode fiber)

>23dB at 1310nm for OSD136L (>60km of singlemode fiber)

>22dB for WA or WB single fiber variants

Receiver Saturation >-10dBm

Optical Transmitter Wavelength 850nm for OSD136 and OSD136C.WA (1310nm for the OSD136L, OSD136LC.WA and

OSD136C.WB and 1550nm for the OSD136LC.WB)

Optical Connector ST standard

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

Electrical Connector 25 pin male D-Subminiature

Power Connector 1.3mm socket on side of case

2 way terminal block on module

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

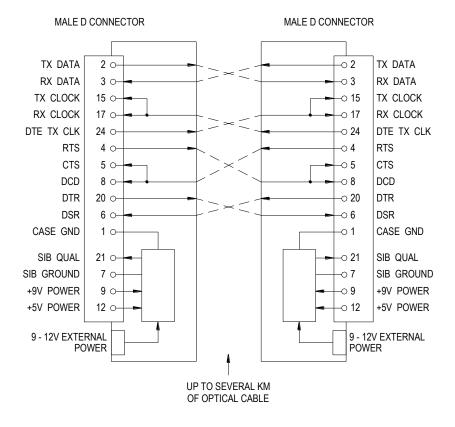
Dimensions of Small Module (mm) 15H x 44W x 80D (excluding optical connectors)

Dimensions of Wall Mount Module (mm) 25H x 104W x 144D

Operating Temperature -20 to +75°C

Relative Humidity 0 to 95% non-condensing

D CONNECTOR PIN ASSIGNMENTS



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