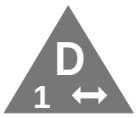
OSD135 ASYNCHRONOUS RS422 TRANSCEIVER



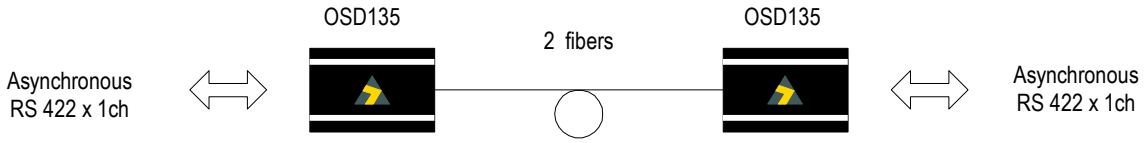
APPLICATIONS

- Secure communications
- Long distance RS422 links
- Data transfer in hazardous environments
- Industrial control links

FEATURES AND BENEFITS

- TTL or RS422 operation
- Extends link lengths to greater than 5km on multimode and 20km on singlemode fiber
- Plugs directly into 25 pin D connector on computers, multiplexers, PBX links etc. employing RS422 or TTL signals
- Full duplex, asynchronous, DC to 1Mbps operation
- More secure than copper cables
- Small size, low cost, robust and reliable
- Compatible with the OSD137 modem

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD135	Fiber Optic RS422/TTL Transceiver
OSD135L	1310nm singlemode version
OSD135PP	Plug Pack Power Supply, 240VAC to 9VDC, 200 mA, 1.3mm plug

SPECIFICATIONS

ELECTRICAL

Data rate	DC to 1Mbs NRZ
Pulse Distortion and Jitter	<±0.2µS over full dynamic range
Input	RS422 levels, or TTL on the + input with - input floating
Output	RS422 levels. Zero optical input produces logical LOW at output

OPTICAL

Wavelength	850nm nominal (1310nm for the OSD135L)
Coupled Transmit Power	-16 to -13dBm peak into multimode fiber -16 to -13dBm peak into singlemode fiber (OSD135L only)
Receiver Sensitivity	<-33dBm peak for 1 x 10^{-9} BER
Optical link budget	>17dB at 850nm (>5km of multimode fiber) >17dB at 1310nm (>20km of singlemode fiber)
Receiver Saturation	>-15dBm peak

PHYSICAL

Electrical Connector	25 pin female D connector for data
Power Connector	1.3mm socket on side of case
Optical Connector	ST standard
Operating Temperature	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Power Requirements	7.5V to 12VDC via external power socket
Weight	100g
Dimensions (mm)	15H x 44W x 80D excluding D connector flange and optical connectors

PIN CONFIGURATION

Pin	Function
1	Protective Ground
2	Transmit Data + (into OSD135)
3	Transmit Data - (into OSD135)
4	Receive Data + (from OSD135)
5	Receive Data - (from OSD135)
7	Shield Ground