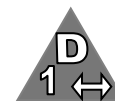


OSD1250 RS232/422/485 REDUNDANT RING OR BUS MODEM

APPLICATIONS

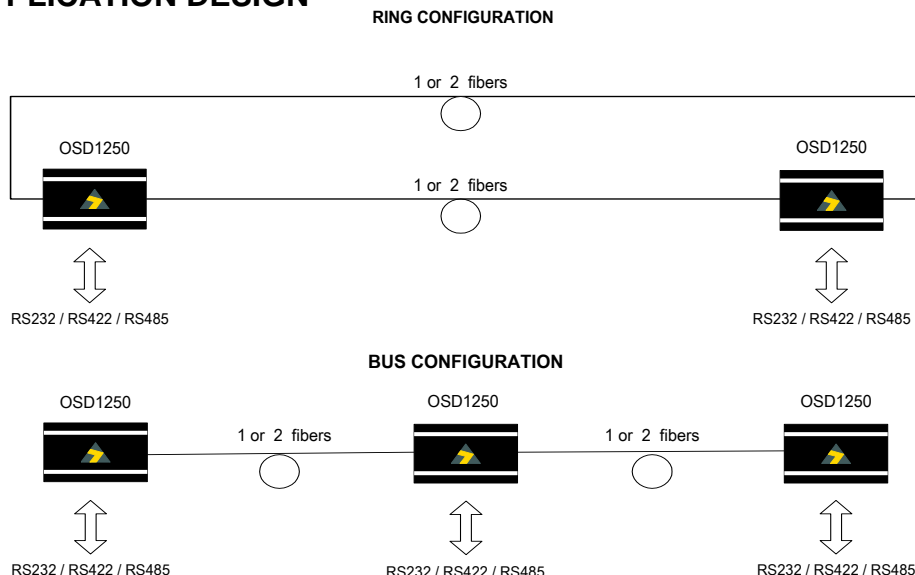
- ▲ Industrial networks using RS422 or RS485 based programmable logic controllers
- ▲ Transportation communications
- ▲ Access control systems
- ▲ Fire and alarm systems
- ▲ Building automation



FEATURES AND BENEFITS

- ▲ 2 and 4-wire RS485, RS422, or RS232 operation
- ▲ Extends module separation to several kilometres of multimode fiber and to over a hundred kilometres of singlemode fiber
- ▲ Compatible with all common fiber sizes
- ▲ Available in redundant Ring and Bus configurations
- ▲ Complete end-to-end isolation with up to 40 units in series
- ▲ DIN rail or surface mounting
- ▲ Built-in test features
- ▲ Safe transmission in hazardous environments
- ▲ Immune to electrical interference
- ▲ Extremely robust electronics and packaging designed for severe industrial environments
- ▲ Full duplex, asynchronous, DC to 2Mbps
- ▲ Powered by non-critical 9 to 30VDC supplies

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD1250	850nm multimode RS232/RS422/RS485 redundant ring or bus data modem card
OSD1250L	1300nm singlemode version
OSD1250.W	RS232/RS422/RS485 redundant ring or bus data modem card, 1 multimode fiber connect between adjacent units
OSD1250L.W	RS232/RS422/RS485 redundant ring or bus data modem card, 1 singlemode fiber connect between adjacent units
Option C	Module version



SPECIFICATIONS

ELECTRICAL

Data Interface	2 and 4-wire RS485, RS422 and RS232
Data Rate	DC to 2Mbps
Electrical Connector	DB26
Bit Error Rate	$<1 \times 10^{-9}$
Alarms	Network failure
Alarm Interface	Opendrain MOSFET rated at 200mA @ 50V maximum

OPTICAL

Optical wavelength	850nm (1300 and 1550nm are optional)
Transmit power	-12 to -6dBm (Higher power levels are available: consult factory)
Receive sensitivity	<-35 dBm
Receive saturation	>-5 dBm
Operating Distances	<ul style="list-style-type: none">> 10km of multimode fiber> 50km of singlemode fiber with 1310nm operation> 100km of singlemode fiber with 1550nm operation
Receiver fail indication	<-39 to -41 dBm
Optical Connector	ST standard

INDICATORS

Copper Transmit Data Present	Amber (1 only)
Receiver Optical Signal OK	Green/Red (2, 1 per port)
Receive Sync OK	Green/Red (2, 1 per port)
Laser OK	Green/Red (2, 1 per port)
Receive Data Present	Amber (2, 1 per port)
Receive Bit Error	Red (2, 1 per port)
Transmitter Switched to Local Crystal	Red (2, 1 per port)

PACKAGING AND ENVIRONMENTAL

Dimensions (mm) excluding flanges and connectors	104W x 144D x 40H (Module) 128W x 142D x 50H (Card)
Weight (kg)	350g (card) 500g (module)
Operating Temperature	-20 to 75°C
Relative Humidity	0 to 95% non-condensing
Power Requirements	9 to 30VDC @ 6VA