

FireFinder Fibre Optic OSD138 Universal Data Modem

Features

- Multi-protocol operation
- Extends link lengths to 5km on multi-mode and over 50km on single-mode fibre
- Full Duplex, asynchronous, DC to 1Mbps
- ST optical connector standard
- Safe transmission in hazardous environments
- Robust and reliable

Description

The OSD138 Module is a high performance universal fibre optic modem that allows the AMPAC range of panels to communicate using RS422, RS232 or RS485 full duplex, asynchronous data over extend distances of several kilometres.

Applications

- Long distance RS422, RS232 or RS485 links.
- Secure, noise immune government and industrial Communications

Specifications

Data Rate	DC to 1Mbps NRZ
Pulse Distortion and Jitter	<±0.3µ sec over full dynamic range
Wavelength	850nm nominal (1300nm for the OSD138L)
Coupled Transmit Power	>-15dBm to -12dBmpeak into 62.5/125 multi-mode fibre >-15dBm to -12dBm peak into 10/125 single-mode fibre (OSD138L only)
Receiver Sensitivity	<-37dBm peak for 1 x 10 ⁻⁹ BER
Optical Link Budget	>22dB at 850nm (>5km of multi-mode fibre for OSD138) >22dB at 1300nm (>50km of single-mode fibre for OSD138L)
Receiver Saturation	>-12dBm peak
Optical Connectors	ST standard
Operating Temperature	-20° to 75° C
Electrical Connections	2 way Term Block (Power) 8 way Term Block (Comms)



Figure 1: OSD138 Universal Data Modem

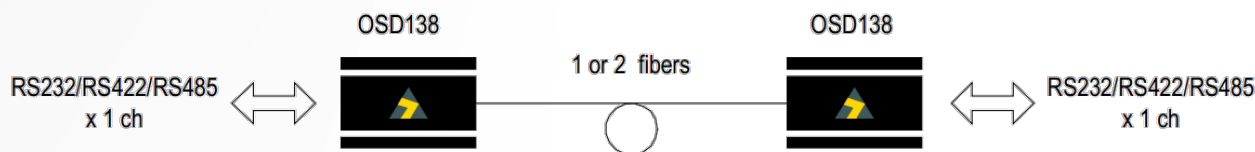
Specifications Continued

Input	User selectable between RS422/RS485 levels, TTL on the + input with - input floating or RS232 levels
User Controls	A 6-way user adjustable lever switch controls: RS422/RS232 or RS485 RS232 polarity 2-wire or 4-wire RS485 RS485 bias on/off RS485 turnaround times
Relative Humidity	0 – 95% non-condensing
Power Requirements	+11 to +35VDC or 22 to 28VAC @ less than 1.8VA
Weight	280g
Dimensions (mm)	114(D) x 105(W) x 31(H)

Item Numbers

159-0251 (5km max)	FireFinder Fibre Optic Multimode 2 Core
159-0252 (5km max)	FireFinder Fibre Optic Multimode 1 Core
159-0253 (50km max)	FireFinder Fibre Optic Single Mode 2 Core
159-0254 (50km max)	FireFinder Fibre Optic Single Mode 1 Core

* Kits contain Pairs



Typical Application