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GREENWICH INSTRUMENTS LTD

N78-795/801

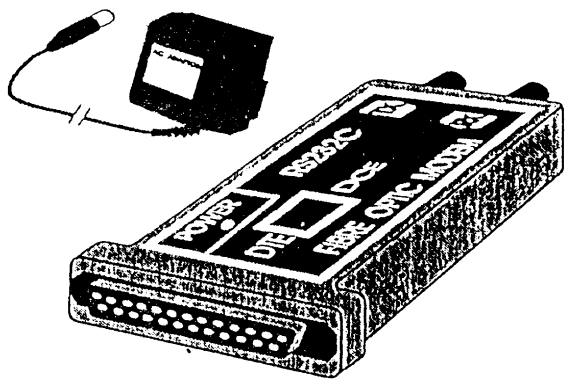
OPERATING INSTRUCTIONS

for

GO232 SMA/ST.850 - RS232

and GO232 SMA/ST - RS232

FIBRE OPTIC MODEM



GO232 SMA/ST.850 & GO232 SMA/ST - RS232 MODEM

GREENWICH INSTRUMENTS LTD

DESCRIPTIONS

The **GO232 SMA/ST.850** is a full duplex 0 to 19200 baud fibre optic RS232C modem. It supports software handshakes (Xon/Xoff), utilising up to 8 kilometres of 50/125 micrometre glass fibre.

The GO232 SMA/ST.850 can be host powered, via pin 9 on the RS232C interface*, or to customers requirements.

The **GO232 SMA/ST** is a low cost, full duplex 0 to 19200 baud fibre optic RS232C modem. It supports software handshakes (Xon/Xoff), utilising up to 100 metres of twin core 1mm plastic fibre (Toray PFU-CD 1002 or equivalent), or glass fibre. The GO232 SMA/ST can be host powered, via pin 9 on the RS232C interface*, or to customers requirements.

The RS232C interface is via a standard 25 way "D" connector, available in male or female types. DTE or DCE configuration is selected by a switch on the face of the equipment.

* Each unit is supplied with a power unit (9 Volt DC 200mA.) to suit country of operation.

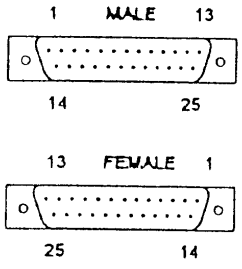
SETTING UP

1. Check that the power units are the correct type for the country of operation and if so connect to the mains.
2. Connect Power leads to the equipment and check red power indicators illuminate.
3. Select DTE or DCE connector configuration. (Computers are usually DTE configuration and peripherals DCE).
4. Route cable following manufactures recommendations concerning required environment and minimum bend radius.
5. Remove caps from fibre optic connectors, connect the fibre optic cable and fit to equipment.

The GO232SMA/ST and GO232SMA/ST.850 have a conductive case and by using the captive screws on the RS232 connector to fix it to the equipment the electrical screening properties will be improved.

NOTE. Tx LED light emissions should not be observed at close range.

PINOUT DIAGRAM

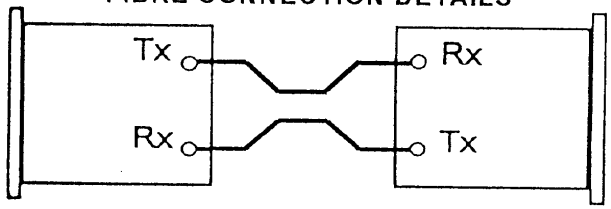


Pin	DTE	DCE
1	No Connect	No Connect
2	Tx	Rx
3	Rx	Tx
4	RTS	CTS
5	CTS	RTS
6	DSR	DTR
7	GND	GND
8	DCD	DCD
9	+ VE*	+ VE*
20	DTR	DSR

OPTO-ELECTRICAL CHARACTERISTICS GO232 SMA/ST

Transmitter at 25°C	
Peak Output (typical)	1.5 mW/sr
Wavelength	660nm
Spectral Half Line Width	30nm
Life to Half Brightness (-3dB) (typical)	100,000 Hours
Peak Coupled Power (typical)	-16dB after 1m of cable
Receiver at 25°C	
Max. Sensitivity (typical)	-36dB (at 660nm)
Saturation Level (typical)	-16dB (at 660nm)
Spectral Range	380 -1100nm (S=10% Smax.)
Smax. Wavelength	850nm
Recommended Cable Attenuation	200dB/Km or less

FIBRE CONNECTION DETAILS



OPTO-ELECTRICAL CHARACTERISTICS GO232 SMA/ST.850

Transmitter at 25°C	
Wavelength	850nm
Life to Half Brightness (-3dB) (typical)	80,000 hours
Peak Coupled Power (typical)	-17dB after 10 metres
Receiver at 25°C	
Max. Sensitivity (typical)	-37dB (at 850nm)
Saturation Level (typical)	-17dB (at 850nm)
Spectral Range	380 -1100nm (S=10% Smax)
Smax Wavelength	850nm
Recommended Cable	50/125 micrometre
Other Cable	62.5/125 100/140 200 micrometre PCS