



**FIBRE OPTIC COMMUNICATIONS - DESIGN - DEVELOPMENT - MANUFACTURER**

## SYD FIBRE OPTIC LINE DRIVER

### FEATURES:

- Duplex RS232 standard core diameter fibres
- Data control and clock lines supported. Clock lines generated or may be an input.
- DC TO 64.kdbs per second
- Asynchronous/synchronous
- Pressed steel housing for EMI and RFI resistance.

### TECHNICAL DESCRIPTION:

Model SYD Fibre Optic Line Drivers are used in pairs to extend RS232 links via a Fibre Optic cable. The applications include longer RS232 links than can be obtained by copper conductors, data security from physical tampering and RFI admissions, data protection from environmental, noise and earth loop.

The Model SYD supports modem control signals RTS, CTS, DSR, DTR and DCD. It also supports clock generation and will receive a clock up to 64kdbs. Synchronous data rates are selected internally by a switch. All data lines are RS232 compatible and power may be supplied either on pin 9, or via an external jack.

### SPECIFICATION:

**OPTICAL** :- Optical sensitivity :- 1uw-30dBm

Max Receive power :- 10dBm

Power budget :- 50um fibre -10dB , 62.5 um fibre -13dB

**V24 Date rate** :- DC to 38.4kbps asynchronous , 64kpbs synchronous

**JITTER DATA** :- Control lines < , Clock :

**ENVIRONMENT** :- Temperature :- 0oC to 70oC, Storage: -25oC to 70oC, Humidity: 10% to 90%

**MECHANICAL** :- Totally enclosed metal case

**SIGNAL CONNECTORS** :- 1 x 25 Dtype Plug , 1 x 2.5mm jack socket

**WAVELENGTH** :- 850nm . 2 x (ST) OR (SMA) F/O Connector

**INDICATORS** :- Power , Rx Output , Link , Tx Output

**DIMENSIONS** :- 79mm x 53mm x 15mm (overall) , 58mm x 46mm x 15mm (body)

**WEIGHT** :- 75g

**ELECTRICAL** :- External Power via jack socket tip positive or Pin 9 < 180mA @ + 8 -12V DC

#### Pin configuration

PL NAME      DIRECTION

#### Baud Rate Select

SW2 OFF 64KB, ON (as table BELOW)

1	Frame						
2	TX	Out					
3	RX	In	SW3	SW4	SW5	Baud Rate	
4	RTS	Out	OFF	OFF	OFF	2K4	
5	CTS	In	OFF	OFF	ON	4K8	
6	DSR	In	OFF	ON	OFF	9K6	
7	SIG OV		OFF	ON	ON	19K2	
8	DCD	Input/Output	ON	OFF	OFF	150	
9	Power	In	ON	OFF	ON	300	
15	TX CK	In/Out	ON	ON	OFF	600	
17	RX CK	In/Out	ON	ON	ON	1K2	
20	DSR	Out					

**SWITCH SETTING :-**

- SW1 ON -Pass through mode
- SW1 OFF- DCD and clock generation internal
- SW6 -DCD ON for output
- SW7 -Rx Ck ON for out put
- SW8 -Tx Ck On for output

**SW1 ON - Pass through mode.**

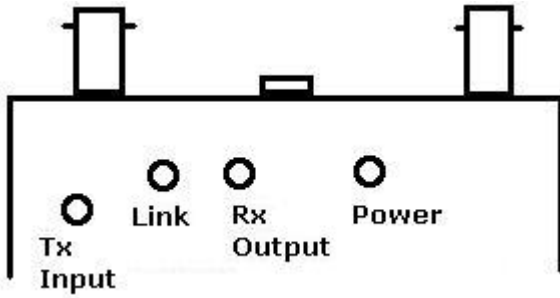
2-----<-----	Tx		Tx ----->-----2
3----->-----	Rx	Crossover	Rx -----<-----3
4-----<-----	RTS		RTS ----->-----4
5----->-----	CTS	Crossover	CTS -----<-----5
8-----<->-----	DCD	Straight	DCD -----<->-----8
20-----<-----	DTR		DSR ----->-----20
6----->-----	DSR	Crossover	DTR -----<-----6
15-----<->-----	TxCk		TxCk -----<->-----15
17-----<->-----	RxCk	Crossover	RxCk -----<->-----17

**SW1 OFF - DCD & clock generation internal.**

2-----<-----	Tx		Tx ----->-----2
3----->-----	Rx	Crossover	Rx -----<-----3
4-----<-----	RTS		RTS ----->-----4
5----->-----	CTS	Crossover	CTS -----<-----5
8-----<->-----	DCD	Straight	DCD -----<->-----8
20-----<-----	DTR		DTR ----->-----20
6----->-----	DSR	Crossover	DSR -----<-----6
15-----<-----	TxCk		TxCk ----->-----15
17-----<-----	RxCk	Crossover	RxCk ----->-----17

**Indicators**

Indicators are located on the underside of the unit.



View from underside

Tx and Rx lights will flash per packet of data received or transmitted.

Power ON :- if DC supply present.

Link ON :- if Fibre Optic link is correct and unit at far end is powered.

<b>Order Code .</b>	<b>Description.</b>
SYD/SM .....	.SYD LINE DRIVER -SMA CONNECTORS
SYD/ST .....	.SYD LINE DRIVER -ST CONNECTORS
PC1 .....	.POWER CUBE, SINGLE
PC4 .....	.POWER CUBE, FOUR

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