

TD-1580 / TD-1581

FULLY COMPATIBLE EIA-530 / 6X4 RS-422 SERIAL INTERFACE with 1x2 RS-232



Overview

The TD-1580 and TD-1581 pair together to form a powerful balanced serial data transport solution. The DB-25 connectors are pinned out to directly support an EIA-530 serial link. However due to the transparency and flexibility of the design, the TD-1580/81 can be used as 6x4 independent 6 Mbps RS-422 channels and 2x1 independent 256 Kbps RS-232 channels (see below for details).



This incredible versatility can solve a myriad of serial data communications problems. Your once limited serial links can not only be consolidated but extended to over 20 Km on a single fiber pair. SCADA (supervisory control and data acquisition), Telecommunications, Facility Automation and Control, even DMX Lighting control applications can all benefit from the TD-1580/81.

For more advanced systems, a 'Regeneration' switch on the TD-1581 allows users to toggle between synchronous applications that require Send Timing (ST) and asynchronous or synchronous applications that require Terminal Timing (TT).

Features:

- Compatible with:
 - TIA/EIA-530 (RS-530)
 - MIL-STD-188-114A balanced type 1 and type 2
 - FED STD 1030A
- Can alternately be used for 6x4 RS-422 and 1x2 RS-232
- EIA-530 and RS-422 channels support data rates from DC to 6.144 Mbps
- Can be used for up to 6 universes of DMX lighting control
- Includes power adapter as well as a 3-position Phoenix™

Applications:

- SCADA
- Oil and Gas
- Home / Facility Automation
- Telecommunications
- Industrial Controls
- DMX Lighting

How do we get so many channels?

By using a technology unique to FiberPlex products called 'transparency', we are able to use all the clock, data and control channels of the standard EIA-530 interface completely independently of one another. This provides the ability to have (4) bi-directional RS-422 serial with (2) unidirectional RS-422 and (1) bi-directional RS-232 with (1) uni-directional RS-232, or even independently as (6) RS-422 in one direction and (4) in the other [6x4] and (2) RS-232 in one direction and (1) in the other [2x1]. The table below shows how these channels are pinned out.

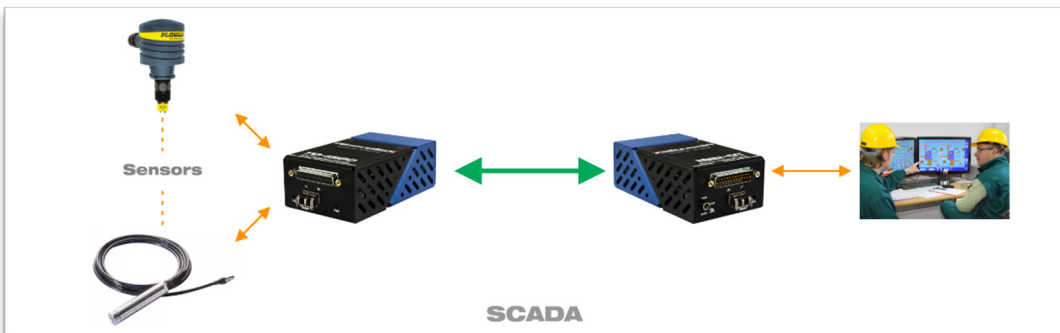
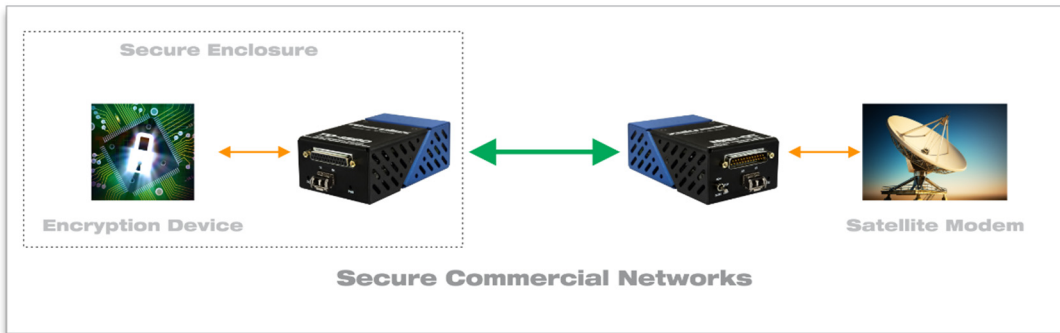
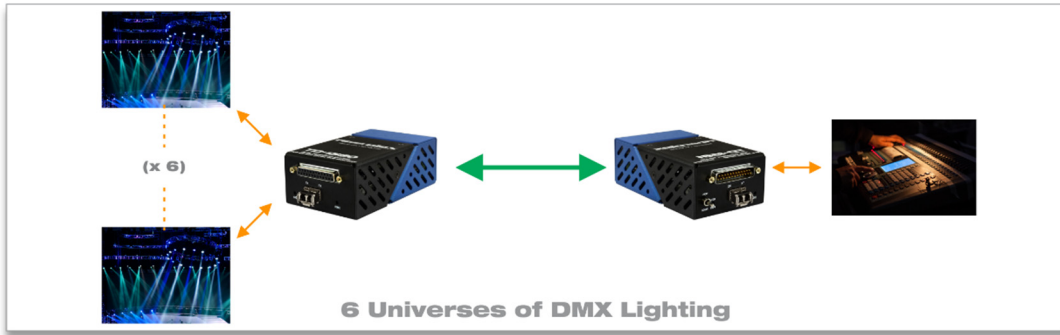
PINOUTS				
Pin	TD-1581 Direction	TD-1580 Direction	6x4 Serial Configuration	EIA-530 Configuration
1			Chassis Ground	Chassis Ground
7			Signal Ground	Signal Ground
2	Out	In	Channel 1 RS-422	TX+
14				TX-
3	In	Out		RX+
16				RX-
4	Out	In	Channel 2 RS-422	TX+
19				TX-
5	In	Out		RX+
13				RX-
20	Out	In	Channel 3 RS-422	TX+
23				TX-
6	In	Out		RX+
22				RX-
24	Out	In	Channel 4 RS-422	TX+
11				TX-
8	In	Out		RX+
10				RX-
15	In	Out	Channel 5 RS-422	RX+
12				RX-
17	In	Out	Channel 6 RS-422	RX+
9				RX-
18	Out	In	Channel 1 RS-232	TX
25	In	Out		RX
21	Out	In	Channel 2 RS-232	TX

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Typical Applications



Ordering Information

Accessories		Part Number	
TDP	6 Position Front Connect Powered Rack for TD Series Modules	TD-1580 - L5B 	Optical Interface: L22 = multimode, 1310nm, 2km, LC L5B = singlemode, 1300nm, 20km, LC C = SFP cage, no optical module <i>Other Optical interfaces available on our custom Catalog</i> Model: 1580 = D-25 Female (DTE) 1581 = D-25 Male (DCE)
TDR-01-AC	6 Position Rear Connect Powered Rack for TD Series Modules		
TTM	Truss Mount Chassis for TD Series Modules		
TD-DINR	DIN Rail Mounting Bracket for TD Series Modules		
TNE-01	Enclosure for (1) TD Module, Outdoor Rated, Environmentally Sealed		
TNE-03	Enclosure for (3) TD Modules, Outdoor Rated, Environmentally Sealed		
PSA-T913	Spare Wall Power Adapter for TD Series Modules, 9V @ 1.3A		