

### Full Duplex DS-3 Modem T3 & E3 Data Transmission

The DS-726/T3 and DS-726/E3 are full duplex transmission systems - a T3 Carrier at 44.735 Mbps and E3 Carrier at 34.368 Mbps. A pair of DS-726/ T3 modems with interconnecting optical cables provides versatile, low cost, high speed, error-free data communication between terminals for a distance of up to 25 km.

The DS-726/T3 and E3 use a highly linear stage to transmit data rates at 44.736 Mbps over a multimode fiber optic cable. The wide optical dynamic range of the DS-726/T3 allows various optical cable core sizes and lengths to be used. The transmission distance can vary from a few feet up to 30 km without causing optical receiver overload.

### System Design

On the receiver side, an integral detector amplifier is used to ensure low noise/high sensitivity reception. Signal quality is monitored by measuring the transmit data input level and the received optical signal strength. A built-in alarm dry contact relay as indicator when signal drops below a pre-determined level.

Wall mounts and rack adapters are available for remote stand alone unit installation. In addition, the DS-726/T3 transmitter and receiver can be powered from a +15V<sub>DC</sub> or -48V<sub>DC</sub> (option) built-in power source; thereby providing versatility in system design.



### Features

- Meets Bellcore, ANSI T1.102, TR-TSY-000499/CCITT & ITS G.703, T3 and E3 standards
- Support AMI/B8ZS/HDB3 line code
- Multimode and singlemode operation over 2 fibers
- Built-in dry contact alarm relay
- Built-in self link tests diagnostic with indicators on the front panel
- Retiming of receive signals for low jitter at both fiber and coax ports
- Built-in Dual Power Redundancy
- Stand Alone unit or Rack Mountable

865	1310	1550	Type	Mode	Wavelength Suffix	Fiber Type	Output Power	Receiver Sensitivity	Optical Loss Budget	Range*	Conn Type
	•		LED	MM	L1	50/125μ	-18 dBm	-33 dBm	15 dB	10 km	ST
	•					62.5/125μ					
	•		ELED	SM	L2E	09/125μ	-10 dBm	-23 dBm	15 dB	23 km	FC
		•	Laser	SM	L2	09/125μ	-08 dBm	-25 dBm	17 dB	25 km	FC

\* Chromatic dispersion and additional losses should be taken into account

# Data (Ethernet/Serial/USB)

## Data

Data rates (T3)	44.736 Mbps	75 $\Omega$ resistive, 1 V p-p
Data rates (E3)	34.368 Mbps	120 $\Omega$ resistive, 1 V p-p
Bit error rate	10E <sup>-9</sup>	
Interface	Meets Bellcore TR-NPL-54, TR-TSY-449, TA34 & CCITT G.5703 Unbalanced I/O interface, bipolar AMI, transparent to line code B3Zs or Bpv-support AMI/B8ZS and HDB3 line code	
Connectors	BNC/F 75 Ohms Unbalanced for T3	
Connectors	BNC/F 120 Ohms Unbalanced for E3	
System alarm	Built-in dry contact alarm relay	

## General

Dimensions & Weight	Stand Alone (SA):	7.255" L x 9.75" W x 1.45" H	32 oz
	Rack Mount:	19" L x 9.75" W x 1.75" H	36 oz
Operating temperature	-20° C to +70° C		
Storage temperature	-30° C to +85° C		
Humidity	0 to 95% non-condensing		
Operating voltage	12 V <sub>DC</sub> (300mA)		
Vibration	Up to 5 g's		
Shock	Up to 12 g's		

## Diagnostics

Status monitoring	LED indicators for PWR, SINC LBO, BPV, LOS, Dry Contact Alarm
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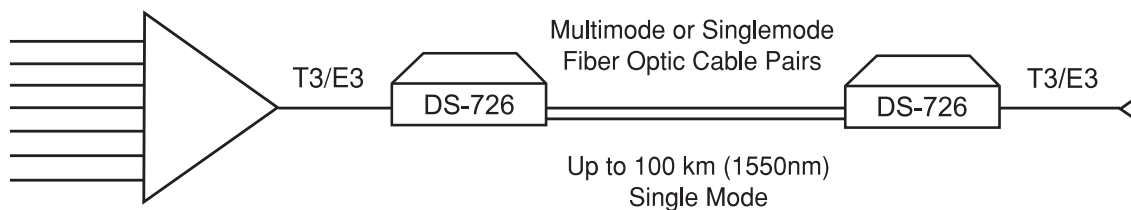
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COMPLIANT

MADE IN THE USA

## Sample Configuration



Voice/Data  
Multiplexer