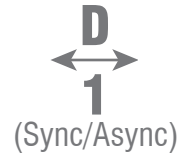




# 510E

*Fiber Optic Sync/Async RS-232, RS-422,  
or RS-485 Data Transmission Systems*



**“Sync/Async Serial Data  
Modem”**



**“Our data network products are diversified,  
reliable, and economical.”**

### **Applications**

- Computer to Computer Communications
- Industrial Process Control
- Traffic Control and Management
- Security Surveillance and CCTV Systems

The 510E Series is a low-cost and high performance Fiber Optic Sync/Async RS-232, RS-422, or RS-485 Data Transmission Systems. The standard 510E system is designed to transport one (1) channel sync or async serial data signal over long distance through one or one pair of singlemode or multimode fiber. The data rate is up to 128kbps per channel (RS-232), and is up to 1Mbps per channel (RS-422). Many versions of optical transmitter and receiver combinations are available to address different distance requirements.

### **Features**

- Transport One Channel Sync/Async Serial Data Over Fiber
- Accommodate RS-232,RS-422, or RS-485
- Data rate up to 128 Kbps (RS-232) or 1 Mbps (RS-422)
- Cost Effective Solution for Remote Data Transport
- 1 Fiber Solution also Available (WDM)**
- CWDM Optics Available**

The 510E comes with two packaging options: a rugged, standalone, and compact unit, or a plug-in card for a card cage system. Panel connectors are provided for data (DB-25 connector) and fiber connection (SC-type for singlemode and ST-type for multimode versions). The 510E can be easily monitored by LED indicators for power, optical link, and data activity. The standalone units are powered by +12 VDC.

The 510E design is capable of addressing a variety of non-standard configurations. Contact us to discuss your custom, OEM/private brand and high volume requirements.



**Doing More With One Fiber**



# 510E

## Control Data Transmission Systems



Fiber Optic Sync/Async RS-232, RS-422, or RS-485 Data Transmission Systems

### Electrical

Channel Number	1
Signal Format	RS-232, RS-422, or RS-485
Interface	DCE
Configuration	Switch between RS-232, RS-422, and Half-Duplex RS-485
Data Rate	Up to 128 Kbps
Bit Error Rate	$< 10^{-9}$
Connector	DB-25

### Physical

Dimension: (H) x (W) x (D)	
Standalone	1.72" x 4.36" x 6.9"
Card-cage plug-in card	5.24" x 0.94" x 11.6"
Power Level	+12VDC @ 0.8 A
Power Connector	2.5mm Jack
Operating Temperature	0 to +50°C (extended range is also available)
Humidity	0 to 95% RH, non-condensing
Status Indicators	Power, Optical Link, Data Activity

### Optical

Fiber Type	Multimode and Singlemode
Number of Fibers	2 or 1
Wavelength	850, 1310 and/or 1550 nm
Fiber Optic Connector	ST (Multimode) SC (Singlemode)

### Optical

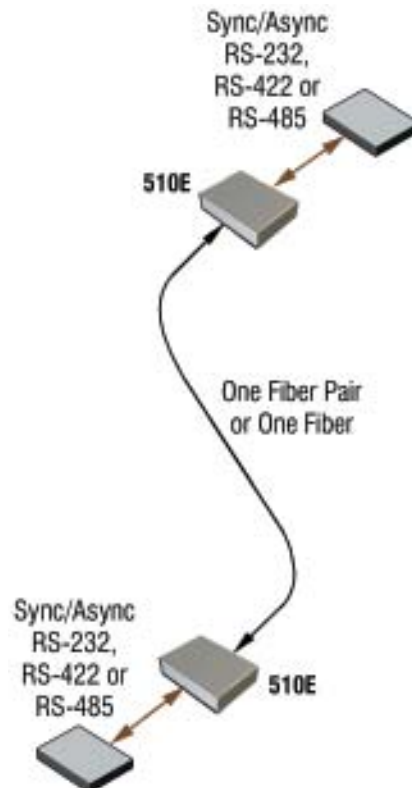
#### Typical Power Budget and Transmission Distance

Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	10	4	2.5
Singlemode Fiber	25	50	31

(1) These are typical values for the 510E Series. The actual values may vary.

(2) These are typical distance coverage figures. The maximum distance coverage may be greater than these typical numbers, depending on fiber type, fiber bandwidth, connector splicing losses, chromatic dispersion, environmental factors, etc.

### Application



### Doing More With One Fiber

Subject to continued product enhancement, we reserve the right to change the above specifications and description without notice.

