



520E

**Fiber Optic Multi-Channel RS-232 or RS-422
Data Transmission System**



**“Multi-Channel 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

Features

- Transport up to 16- Channel RS-232 or 8-Channel RS-422 Data Over One Fiber
- Data rate up to 128 Kbps (RS-232) or 1 Mbps (RS-422)
- Cost Effective Solution for Remote Data Transport of Multiple Serial Data Channels
- 1 Fiber Solution also Available (WDM)**
- CWDM Optics Available**

The 520E Series is a low-cost and high performance Digital Fiber Optic Multi-Channel RS-232 or RS-422 Data Transmission System providing simultaneous transmission of multiple serial data channels. The standard 520E system is designed to transport sixteen (16) channel async RS-232, or eight (8) channel async RS-422 data signals over long distance through one or one pair of singlemode or multimode fiber. Data rates are up to 128kbps for each RS-232 channel, and up to 1Mbps for each RS-422 channel. Models with sync serial data or handshake control are also available. Many versions of optical transmitter and receiver combinations are available to address different distance requirements.

The 520E 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-78 connector) and fiber connection (FC-type for singlemode and ST-type for multimode fiber). The 520E can be easily monitored by LED indicators for power and optical link. The standalone units are powered by +12 VDC.

The 520E 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



520E

Control Data Transmission Systems



Fiber Optic Multi-Channel RS-232 or RS-422 Data Transmission System

Electrical

Channel Number	16 (RS-232) or 8 (RS-422)
Signal Format	RS-232 or RS-422
Interface	DCE
Data Rate	Up to 128 Kbps (RS-232) Up to 1 Mbps (RS-422)
Bit Error Rate	$< 10^{-9}$
Connector	DB-78

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 @ 1A
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	1310 and/or 1550 nm
Fiber Optic Connector	ST (Multimode) FC (Singlemode)

Optical

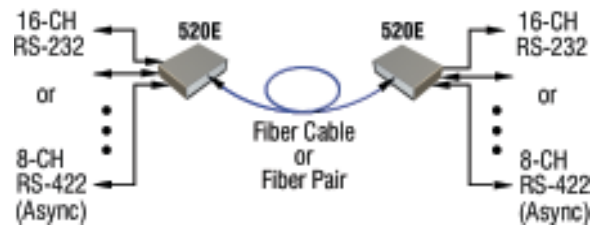
Typical Power Budget and Transmission Distance

Application	Power Budget (1)	Typical Distance KM (2)	Typical Distance Miles (2)
Multimode Fiber	12	2	1.2
Singlemode Fiber	16	40	25
Singlemode Long Distance	16	60	37.5

(1) These are typical values for the 520E 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



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

