



530E

Fiber Optic Add-Drop Data Network Systems



“Add-Drop Serial Data Modem”



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

Applications

Polled/Response SCADA Networks

Traffic Control and Management

Industrial Process Control

Security Surveillance and CCTV Systems

Features

Advanced Self-Healing Ring Scheme

Support RS-232 or RS-485

Async Data Rates up to 128 Kbps

CWDM Optics Available

The 530E is a high performance Fiber Optic Multi-Drop Data Network System capable of interconnecting multiple devices fitted with RS-232 or RS-485. The 530E supports either linear bus (531 Series) or ring (532 Series) network architecture over long distance through one or two pair of singlemode or multimode fiber. Asynchronous data rate is up to 128kbps. Many versions of optical transmitters and receivers can be used in the 530E to address different distance requirements.

The master unit, connected to a host computer, can be placed at the end or in the middle of a pair of fiber optic cables with all the slave units daisy chained through the fiber optic cable. The optical signal from upstream and downstream are decoded and re-transmitted at each node. Additionally, a second master unit can be placed at the other end of the fiber optic cable as a backup master. In the event of cable breakage or equipment failure, the backup master can start polling the remote units from the opposite direction.

The 530E Series is available with two packaging configurations: a rugged, standalone, and compact unit, or a plug-in card for a card cage system. Panel connectors are provided for data (DB25 connector) and fiber connection (SC-type for singlemode and ST-type for multimode fibers). The 530E Series can be easily monitored by LED indicators for power, optical link, and data channel activity. The standalone units are powered by +12 VDC.

Due to its flexible design, the 530E 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



530E

Fiber Optic Add-Drop Data Network Systems

Control Data Transmission Systems



Electrical

| | |
|----------------|---------------------|
| Channel Number | 1 |
| Signal Format | RS-232 or RS-485 |
| Interface | DCE |
| Data Rate | Async up to 128Kbps |
| Bit Error Rate | < 10 ⁻⁹ |
| Connector | DB25 |

Physical

| | |
|------------------------|---|
| Dimension: (H x W x D) | |
| Standalone unit | 1.72" x 4.36" x 6.9" |
| Card-cage plug-in card | 5.24" x 0.94" x 11.6" |
| Power Level | +12 VDC @ 1.6 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 | Optical Link, Data Activity, Power |

Optical

| | |
|-----------------------|---|
| Fiber Type | Multimode or Singlemode |
| Number of Fibers | 2 or 1 |
| Wavelength | 850 or 1310 nm |
| Fiber Optic Connector | ST (for Multimode) SC (for Singlemode) |

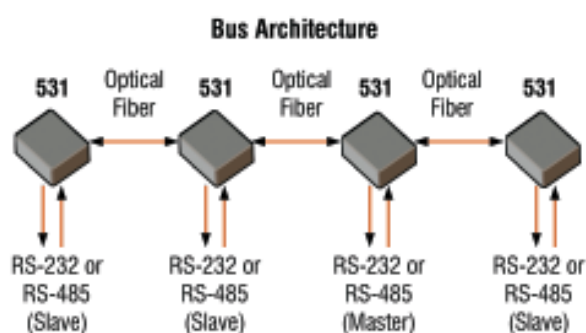
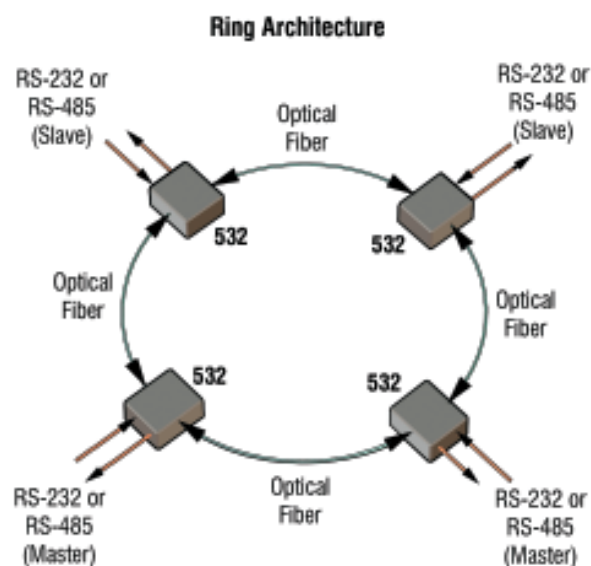
Typical Power Budget and Transmission Distance

| 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 530E 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.

Applications



Doing More With One Fiber

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