

#### Welcome

Welcome to the Telebyte Datacom Networking Products Catalog for Fiber and Copper. We are pleased to present this outstanding array of interface converters, short haul modems, fiber optic products and more. Please be certain to visit our web site at www.telebytedatacom.com for more detailed information such as specifications, manuals and application notes.

### We Speak Your Language

Telebyte provides product information in a wide variety of languages and has an extensive network of distributors around the world. Please go to www.telebytedatacom.com to view this information in another language or find contact information for a distributor in your country.

#### About Telebyte, Inc.

Headquartered in Greenlawn, New York, we are a leading manufacturer of data communications equipment for copper and fiber networks. This product line includes fiber optic LAN extenders, fiber optic converters and modems, interface converters, short haul modems, surge protection devices, and others. In addition, our high-tech enterprise offers an outstanding product line of local loop simulators and noise generators used in the development of signaling devices for technologies achieving broadband access to the Internet as well as the family of Digital Subscriber Line (DSL) signaling techniques. Our solutions accurately simulate xDSL technologies such as ADSL, ADSL2+, HDSL, SHDSL, VDSL and VDSL2, for a wide variety of standards, including ETSI, ANSI, ITU and NTT.

Since 1983, we have been dedicated to leading the industry in product quality and customer service, deploying thousands of Telebyte products through our network of domestic and international distributors. Customers include industry leaders such as Alcatel, Lucent, Cisco, Ikanos, NEC, Verizon, AT&T and Infineon.

**Technical Support:** 

www.telebytedatacom.com/support/index.asp



### LAN Transceivers/ **Interface Converters**

### Model 373 - 10Base-T to Multimode **Fiber Optic Transceiver**



- Extend LANs over 1 mile
- **Full Duplex**
- Plug and Play no software
- Uses industry standard fiber optic cables
- Impervious to lightning and surges
- Total electrical isolation
- 10Base FL compatible

#### **Product Description**

Now you can break the distance barrier of Ethernet-based Local Area Networks and achieve total system safety from electrical interference and surges. The addition of a pair of Model 373s allows your LAN to be extended to a distance of 2 KM (over 1 mile). The full-duplex signals of the 10Base-T port are converted to optical signals and driven over fiber cables.

A group of five LEDs provide indication of Fiber Optic Link Monitor, Twisted-Pair Link Monitor, Collision, Traffic and Power. An SQE switch ensures compatibility with both old and new Ethernet adapters by allowing the user to enable or disable the SQE Heartbeat option.

#### To Order Use Model Number:

373 373-220

(220 V)

### Model 365 - RS-232 to RS-422/RS-485 **Interface Converter**



#### **Features**

- User-Selectable RS-422 or RS-485
- User-Selectable Two- or Four-Wire RS-485
- DataSpy® LCD Display
- Intelligent Control of RS-485 Transmitter and Receiver
- DTE/DCE Compatible
- Data Rates Up to 115.2 KBPS

#### **Product Description**

The Model 365 RS-232 to RS-422/RS-485 Interface Converter allows operation in compliance with RS-485 or RS-422 equipment, and RS-232. When operating as RS-485 the Model 365 has an "intelligent" mode which provides control of the RS-485 line. Operating as an RS-232 to RS-422 interface converter, the Model 365 converts fullduplex data (TD and RD) between RS-232 and RS-422. As an RS-232 to RS-485 converter the Model 365 can be configured as a two-wire or a four-wire converter. For RS-485 half-duplex protocol, the Model 285 can be configured to control its data flow in one of two ways. The first is via the use of RTS, pin 4, of the RS-232 port. The second is to turn it on when TD data is applied to the RS-232 port.

#### To Order Use Model Number:

365M-220 365M

**Male Connector** Male Connector (220 V)

365F 365F-220

**Female Connector** Female Connector (220 V)

(All are CE Certified)



### **Interface Converters**



# Model 9365 - RS-232 to RS-422/RS-485 Interface Converter with DB9 Connector



#### **Features**

- DIN Rail Mountable
- User-Selectable RS-422 or RS-485
- User-Selectable Two- or Four-wire RS-485
- DataSpy® LCD Display
- Intelligent Control of RS-485 Transmitter and Receiver
- DTE/DCE Compatible
- Data Rates Up to 115.2 KBPS

#### **Product Description**

The Model 9365 is a cost-effective solution designed to enable networks using the latest DB9 interface connections to seamlessly communicate between RS-485 or RS-422 devices, and RS-232 equipment at data rates up to 115.2 KBPS. Its Tri-Mode capabilities provide ultimate flexibility for user-selectable conversion between RS-232 and either RS-422 or RS-485 devices, while its new reengineered design permits an easy snap-on connection to standard DIN Rails.

#### To Order Use Model Number:

9365

9365-220 (220 V)

# Model 285 - RS-232 to RS-422/RS-485 Interface Converter



#### **Features**

- User-Selectable RS-422 or RS-485
- User-Selectable Two- or Four-Wire RS-485
- Intelligent Control Of RS-485 Transmitter And Receiver
- TD & RD LED's
- DTE/DCE Compatible
- Data Rates Up to 64 KBPs

#### **Product Description**

The Model 285 RS-232 to RS-422/RS-485 Converter is a unique interface converter that can be configured to operate in compliance with RS-485 or RS-422 equipment, and RS-232. When operating as RS-485 the Model 285 has an "intelligent" mode which provides control of the RS-485 line. When configured to operate as an RS-232 to RS-422 interface converter, the Model 285 converts full-duplex data, TD and RD, between RS-232 and RS-422.

The Model 285 is equipped with a five-position dip switch that is used to select the following:

RS-422 mode/4 wire RS-485 mode/4 wire 220 Ohm terminator RS-485 mode/2 wire RS-485 mode/controlled by RT SRS-485 mode/controlled by

data

#### To Order Use Model Number:

285

285 - 220 (220 V)







# Model 366 - RS-232 to RS-485 Two-Wire with LCD Display



#### **Features**

- DataSpy® Status Display
- Implements Low Cost LAN
- Supports 32 Users
- Uses Single Twisted Pair
- External DTE/DCE Switch
- Programmable Contention
- Selectable Termination

#### **Product Description**

The Model 366 allows the interfacing of RS-232 based equipment with networks/equipment using RS-485. Transmission and reception of data to and from the network is programmable using dip switches and the RS-232 control signals RTS (Request to Send) and CTS (Clear to Send). In order to establish an orderly flow of data on the single twisted pair, the Model 366 offers three choices of data flow control. The user must select the mode that avoids contention problems and the possible collision of data caused by two devices attempting to transmit simultaneously.

#### To Order Use Model Number:

366M 366M-220

Male Connector Male Connector (220 V)

366F-220

Female Connector Female Connector (220 V)

(All are CE Certified)

### Model 253 - RS-232 to RS-422 Interface Converter



#### **Features**

- DB9 Data Port
- Compatible with PC/386/486
- Full Duplex
- Surge Protection

#### **Product Description**

Adding an RS-422 interface to a PC is now a snap. The Model 253 RS-232 to RS-422 Interface Converter does this for full-duplex signals at data rates up to 19.2 KBPS, without requiring any AC or DC power. With only TD, RD and ground, the Model 253 provides operation over 8,000 feet of twisted pair into a load of 120 Ohms. The Model 253 features a female DB9 connector, thus allowing it to be plugged directly into any one of a PC's COM ports. When using the Model 253 in this mode the DTE/DCE switch is positioned to the DCE position.

#### To Order Use Model Number:

#### 253T

with Terminal Block

**253P** with RJ-11

253PP2 with RJ-45

(All are CE Certified)



### **Interface Converters**



# Model 63-2SA RS-232 to RS-422 Interface Converter



#### **Features**

- Full-Duplex Signals
- DTE/DCE Switch
- TD and RD Indicators
- DC to 115.2 KBPS

#### **Product Description**

The Model 63-2SA provides a hardware conversion for full-duplex signals between RS-232 and RS-422 I/O ports. Because the RS-232 port may look like a computer or a modem, the converter is equipped with a DTE/DCE selector switch. The Model 63-2SA will couple any RS-232C port with any RS-422 device, or two RS-232 devices over a greater distance when using two 63-2SAs back to back as line drivers.

The 63-2SA contains TD and RD LEDs to allow rapid verification of equipment performance. A programmable cable terminator provides the flexibility of mating with various cables.

#### **To Order Use Model Number:**

63-2SA

63-2SA-220 (220 V)

### Model 265 - RS-232 to RS-422 Optically Isolated Interface Converter



#### **Features**

- Eliminates Ground Loops
- 19.2 KBPS at 2 Miles
- TD and RD Indicators
- Use in Pairs as Double-Isolated Short Haul Modems

#### **Product Description**

Telebyte's Model 265 RS-232 to RS-422 Optically Isolated Interface Converter provides total isolation between RS-232 based systems and RS-422. Unique circuitry allows the RS-422 port to withstand surges exceeding 10 kilovolts. A switch is included to reverse pins 2 and 3 of the RS-232 connector to accommodate DTE or DCE ports. Data flow is displayed on TD and RD LED indicators. The RS-232 input is a DB-25 male connector. The RS-422 interface is a five-position terminal strip where one of the terminals is an earth ground connection (used when the environment can produce surges on the two twisted pairs of the RS-422 port). Since the RS-422 circuitry is optically isolated a separate power supply (a wall mounted transformer) is included for the RS-422 port. The power for the RS-232 interface is derived from TD or any one of the control pins of the interface, 4 (RTS), 5 (CTS), 6 (DSR), 8 (DCD), or 20 (DTR).

#### To Order Use Model Number:

265

265-220 (220 V)



### **Interface Converters**



### Model 109A - Bidirectional Parallel-Serial Converter-Buffer



- **Printer Support**
- Parallel to Serial
- Serial to Parallel
- 512K Byte Buffer
- Data Rate to 115.2 KBPS

#### **Product Description**

The Model 109A is a bidirectional interface for parallel and serial interfaces. Connect a computer with parallel output to a serial printer or a computer with serial output to a parallel printer. The Model 109A contains a 512-KB data memory. Operational parameters of the Model 109A are set via DIP switches that are accessible from the side of the unit and include direction of conversion, Baud rate, character length, parity and handshake mode. The handshake switch allows a software mode called X-ON/X-OFF or a hardware mode of operation which supports DTR/DSR and RTS/CTS.

#### To Order Use Model Number:

109A 109A-220

(220 V)

### Model 290 - RS-232 to RS-422/RS-485 **Concentrator - Wiring Hub**



#### **Features**

- Break RS-485 Limit, Expand to 496 Nodes
- 16-Port Capacity
- Set Any Port to RS-422 or Two-Wire RS-485
- **Provides Isolation Between Ports**
- All Ports Surge Protected
- Increased System Reliability

#### **Product Description**

The Model 290 RS-232 to RS-422/RS-485 Concentrator Wiring Hub offers a unique group of features for applications using RS-422 and/or RS-485 for communications between a multiplicity of devices. Based upon a masterslave relationship, the Model 290 lets users expand RS-485 networks to 496 nodes, breaking the restriction of RS-485 that limits a network to 32 nodes. Greater network capacity is possible by cascading several Model 290s. Industrial control applications are a prime example of the use of this type of communications protocol. The 16 discrete ports on the wiring hub provide the advantage of isolation between ports thus increasing overall reliability of the network.

#### To Order Use Model Number:

290 290-220

(220 V)





# Model 65A - RS-232 to Current Loop Converter



#### **Features**

- Active/Passive Loops
- 20 or 60 mA Operation
- DC To 19.2 KBPS
- Half/Full Duplex
- Optically Isolated
- DTE/DCE Selectable

#### **Product Description**

The Model 65A is a small, versatile, RS-232 to Current Loop Converter for use with teletypes or computers providing local terminal input via a 20 mA (or 60 mA) current loop. The Model 65 includes a wall-mounted transformer and internal power supply circuitry.

The Model 65A provides switch selection of all operating modes including:

Half Duplex - Passive Loop Half Duplex - Active Loop Full Duplex - Passive Loop Full Duplex - Active Loop

An I/O selection switch is included to accommodate both DTE and DCE devices.

#### **To Order Use Model Number:**

65A

65A-220 (220 V)

### Model 62-2 RS-232 to EIA-530 Interface Converter



#### **Features**

- Supports 10 Category I & 3 Category II Circuits
- Full EIA-530 & RS-422 Compliance
- DTE & DCE Models
- Meets MIL-STD-188-114 Type 1/2
- Up to 256 KBPS Data Rate

#### **Product Description**

Conversion between RS-232 and EIA-530 is accomplished by the Models 62-2. This device provides conversion for the entire EIA-530 interface which includes ten Category I circuits and three Category II circuits. The 62-2 is designed to interface to a DCE RS-232 port. The electrical interface of the EIA-530 port fully complies with RS-422. The Category I signals are differential and the Category II signals are single ended. The unit therefore, fully complies with the signal requirements of MIL-STD-188-114, Type 2.

Each device is powered by the Model 62-4PS wall mounted power supply with eight-foot line cord, fully connectorized using a mini-DIN connector.

### **To Order Use Model Number:**

62-2

62-4PS
Power Supply

**62-4PS-220** Power Supply (220 V)







### Model 245 - RS-232 to RS-422/RS-485 Optically Isolated Interface Converter



#### **Features**

- Total Isolation
- Selectable RS-422 or RS-485
- Selectable two- or four-wire RS-485
- Intelligent Control of RS-485
- TD & RD LEDs on Each Side of Opto Barrier
- Data Rates up to 128 KBPS

#### **Product Description**

The Model 245 RS-232 to RS-422/RS-485 Optically Isolated Interface Converter is an optically isolated version of our Model 285. When operating as an RS-232 to RS-422 interface converter, the Model 245 converts full-duplex data, TD and RD, between RS-232 and RS-422. When operating in RS-485, Model 245 has an "intelligent" mode which provides control of the RS-485 line. The Model 245 controls its transmitter data flow in two ways, the use of RTS, pin 4 of the RS-232 port, or turning it on when TD data is applied to the RS-232 port. In the twowire mode, when no data is received by the RS-232 receiver, the RS-485 receiver is switched ON. When data is detected for transmission the receiver is switched OFF. In the four-wire mode the RS-485 receiver is constantly ON while the transmitter is switched as required.

#### To Order Use Model Number:

245

245-220 (220 V)

### Model 268 - RS-232 Opto Isolation Module



#### **Features**

- **Total Electrical Isolation**
- **Eliminates Noise Problems**
- **Eliminates Ground Loops**
- Use for Data & Control
- **UL Components**

#### **Product Description**

The Model 268 Opto Isolation Module provides a communications link that has no electrical connections from one port to the other. Isolation is an important consideration if a system uses different power sources, has noisy signals or must operate at different ground potentials. In addition to opto isolation, the Model 268 incorporates micro power DC-to-DC converters that generate the necessary operating voltages. There are two sets of these circuits, one for each port. The Model 268 will operate even if only TD and RD are connected. The DCE port is implemented with a DB-25 male connector while the DTE port uses a female DB-25 connector. The case is fabricated from aluminum and is not connected to either port.

#### To Order Use Model Number:

268



# Model 9268 - RS-232 Opto Isolation Module with DB9 Connectors



#### **Features**

- DB9 Interface
- Total Electrical Isolation up to 2500 VAC
- Eliminates Noise and Ground Loop Problems
- Use for Data and Control
- Data Rates up to 115 KBPS
- No Power Required

#### **Product Description**

Ensure clean data transmission and reception between two devices by installing Telebyte Model 9268 Opto Isolation Module with DB9 Connectors. For applications ranging from testing laboratories to factory floors, isolation is a critical component in data communications environments. Minimize the occurrence of data errors, voltage spikes and system faults while providing full-duplex, optically-isolated signal paths for both TD and RD, and a control signal pair selected by internal jumpers (CTS, RTS, DCD, DTR).

The Model 9268 protects against ground loops between devices that use different power sources, generate dissimilar ground currents or produce noisy signals for data rates up to 115 KBPS. Equipped with a standard DB9 interface for direct connection to the latest computer hardware, the Model 9268 is designed to protect against these problems in a smaller form factor than 25-pin serial connections.

#### To Order Use Model Number:





### **Short Haul Modems**

# Model 201F - RS-232 Auto Powered Line Driver



#### **Features**

- Operates with only Pins 2(TD), 3(RD), & 7(GND)
- Screw Terminals and RJ-11
- DTE/DCE Switch
- Built-in Surge Protection
- Female RS-232
- 19.2 KBPS, Full Duplex, 2.1 Miles

#### **Product Description**

The Model 201 RS-232 Auto Powered Line Driver requires only TD, RD, and signal ground for power and full-duplex operation up to 19.2 KBPS. The Model 201 is equipped with screw terminals and an RJ-11 connector to offer the user a choice of termination for the four-wire line. Future changes in site wiring are, therefore, easily accommodated. The DTE/DCE switch allows reversing of pins 2 and 3 of the RS-232 connector to accommodate computers, terminals and multiplexers. Surge protection for the four-wire line is also built in.

#### To Order Use Model Number:

#### 201F

**Female Connector** 

(CE Certified)

# Model 209 - RS-232 Micro Line Driver - DB9 Connector



#### **Features**

- · Compatible with PC
- 386/486 Pentium COM Ports
- Full Duplex to 19.2 KBPS
- No AC or DC Power Screw
- Terminals or RJ-11
- Small Size

### **Product Description**

The Model 209F offers all the features of the Model 201 in a package that is approximately one third the volume. Measuring 1.3" W x 3" L x .85" H, the Model 209F incorporates a female DB9 connector so that it can be plugged directly into any one of the PC's serial COM ports. The 209F and the 201 are fully compatible with each other at the line side. The Model 209F can be ordered with either screw terminals or an RJ-11 connector; specify 209FT for screw terminals or 209FP for RJ-11 modular phone connector. The Model 209 contains a DTE/DCE switch to reverse pins 2 and 3 of the DB9 connector.

#### To Order Use Model Number:

#### 209FT

**Female Connector - Screw Terminals** 

#### **209FP**

Female Connector - Modular Phone Connector

(All are CE Certified)



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### **Short Haul Modems**

# Model 227F - RS-232 High-Speed Line Driver with LCD Display



#### **Features**

- DataSpy® Status Display
- Full Duplex to 5 Miles
- Async, DC to 115.2 KBPS
- Powered by TD
- Powered by RJ-11 and Screw Terminals
- Built-in Surge Protection
- Fully Compatible with Model 221 up to 19.2 K

#### **Product Description**

The Model 227 RS-232 High-Speed Line Driver with LCD Display provides full-duplex transmission from DC to 115.2 KBPS over two twisted pairs. The Model 227 includes Telebyte's unique DataSpy LCD display that provides the user with important status information regarding the operation of the device. This LCD operates from less than one milliwatt of power and does not affect the operation of the Model 227.

The Model 227 is offered with a female RS-232 connector. The four-wire line interface is a five-position terminal block and an RJ-11 modular phone connector. The four-wire line includes built-in surge protection which uses pin 1, Frame Ground, as the path for suppressing surges.

#### To Order Use Model Number:

227F

**Female Connector** 

# Model 72A - Optically-Isolated Line Driver



#### **Features**

- DC TO 19.2 KBPS
- Optically Isolated
- TD & RD LEDs
- Loopback Switch
- Built-In Surge Protection
- Male or Female Connectors
- Screw Terminals and RJ-11

#### **Product Description**

The Model 72A Optically-Isolated Line Driver links RS-232 based devices over extended distances. It provides optical isolation and has built-in verification of operation using a loopback switch. The Model 72A communicates via four-wire cable with another 72A, 72 or the rack-mounted Model 75. The Model 72A is designed for asynchronous operation over two twisted-pair, non-loaded, metallic (DC continuity) cable up to 19.2 KBPS. Each modem is equipped with Transmit Data and Receive Data LEDs to simplify installation and troubleshooting. Verification of modem operation is simplified using the built-in loopback switch. A second switch reverses pins 2 and 3 of the RS-232 connector for interfacing with either DCE or DTE devices. The Model 72A is available with male or female DB-25 connectors.

#### To Order Use Model Number:

72AM 72AM-220

Male Connector (220 V) CE Certified

72AF 72AF-220

Female Connector (220 V) CE Certified





### Model 92 - RS-232 Sync-Async Line Driver



#### **Features**

- Synchronous Transmission at 1.2 to 19.2 KBPS
- Async Transmission 0 to 19.2 KBPS
- Clocking from Internal, External or Received
- No AC or DC Power
- 3 Miles at 19.2 KBPS
- Screw Terminals and RJ-11

#### **Product Description**

The versatile Model 92 RS-232 Sync-Async Line Driver offers a wide variety of features. Full async and sync performance in one unit offering full-duplex operation up to 19.2 KBPS. The user-selectable clocking options provided are among the most versatile available - internal from a crystal clock, external from the DTE, or derived from the received data.

This modem includes special circuitry to allow the unit to derive it's power from the modem interface signals. The modem is supplied with a male DB-25 connector and a four-position terminal block and RJ-11 for connection to the line. The Model 92 is compatible with any RS-232 DTE port, and on the line side with the Model 77 rackmounted sync short haul modem or another Model 92.

#### To Order Use Model Number:

### Model 224F - RS-232 Line Driver with **Control Signals and LCD Display**



#### **Features**

- DataSpy® Status Display
- Full Duplex & Handshake
- Loopback & DTE/DCE Switch
- DC to 19.2 KBPS
- Supports DTR & DCD
- Compatible with Rack-Mounted Model 79
- Optically Isolated

#### **Product Description**

The Model 224 RS-232 Line Driver with Control Signals and LCD Display provides for transmission of a handshake signal in each direction and communication of fullduplex data up to 19.2 KBPS - all while ensuring complete optical isolation. The Model 224 includes Telebyte's unique DataSpy LCD display, that provides the user with important status information regarding the operation of the device. The LCD is useful during the installation and checkout and whenever there are suspected problems. The graphic display presents the user with live status of the transmit and receive data signals, TD and RD, and control signals, CTS, RTS, DSR, DCD and DTR.

#### To Order Use Model Number:

224F 224F-220 **Female Connector** (220 V)

92 (CE Certified)







# Model 272A - RS-422 to Fiber Optic Converter



#### **Features**

- Data Rate to 2.5 MBPS
- Full-Duplex TD and RD
- ST Connectors

#### **Product Description**

The Model 272A performs an interface conversion between full-duplex, RS-422 signals and their equivalent for fiber optic transmission. For applications where the transmission medium must be protected from electrical interference, lightning, atmospheric conditions or chemical corrosion, fiber optics is the perfect solution. The Model 272A RS-422 to Fiber Optic Converter handles full-duplex data rates to 2.5 MBPS. The electrical interface to the RS-422 port is fully differential for transmit and receive data and is implemented in an industry standard DB-25 connector. The fiber optic ports are implemented using industry standard ST connectors. The design has been optimized for 62.5/125 micron fiber cable; however, other sizes may be used. The optical signal wavelength is approximately 850 nm. The optical power budget for the Model 272A is 12 dB. In normal applications the distance between a pair of Model 272As will be at least 2 KM (6,600 ft). Power to operate the Model 272A is supplied by a small, wall-mounted, 9-VAC transformer and line cord.

#### To Order Use Model Number:

272A

272A-220 (220 V)

# Model 276A - RS-485 to Fiber Optic Converter



#### **Features**

- Data Rate to 1 MBPS
- Programmable Data Control
- ST Connectors

#### **Product Description**

The Model 276A transmits an RS-485 signal via a fiber optic link. For applications where the transmission medium must be protected from electrical interference, lightning, atmospheric conditions or chemical corrosion, fiber optics is the perfect solution. The Model 276A accepts half-duplex data rates to 1 MBPS. The RS-485 electrical interface is a balanced, half-duplex, digital interface which is implemented in a female DB-25 connector. In an RS-485 network the control of data flow is determined by the designer. In order to provide the greatest versatility the Model 276A enables the RS-485 transmitter when data is detected at the fiber optic receiver. The fiber optic ports are implemented using industry standard ST connectors. Mating cables should be 62.5/125 micron fiber cable. The optical signal wavelength is approximately 850 nm and optical power budget is 12 dB. A pair of Model 276As provide reliable communications over fiber where the loss is limited to 12 dB. This translates to distances of at least 2 KM (6,600 ft). Power to operate the Model 276A is supplied by a small, wallmounted transformer and line cord.

#### To Order Use Model Number:

276A

276A-220 (220 V)





## **Fiber Optic Products**

### Model 279 - Single-Mode to Multimode Converter



#### **Features**

- DC to 2.5 MBPS
- Full duplex
- 850 nm to 1300 nm
- In-line mounting
- Small size
- Data LEDs
- Line Loss switch
- Single-mode distance to 20 Kilometers

#### **Product Description**

The Model 279 provides transparent conversion between fiber optic devices utilizing multimode fiber and those with single-mode fiber. Single-mode fiber can transmit data over much longer distances than is possible with multimode fiber. It accomplishes this by limiting the amount of power lost through leakage in the walls of the fiber and using 1300 nm wavelength emission which has less attenuation than 850 nm. Thus, this converter regenerates signal strength and is used to extend the distance far beyond the specification for multimode fiber. The Model 279 can also be used when the optical fiber type of the equipment is not compatible with the installed fiber optic cable.

#### To Order Use Model Number:

279 279-220

(220 V)

### Model 271 - RS-232 Fiber Optic Auto **Powered Line Driver**



#### **Features**

- Full Duplex to 56 KBPS
- 2 Kilometers on 62/125 Fiber
- Total Electrical Isolation
- **Eliminates Noise Problems**
- ST Connectors
- No Power Required

#### **Product Description**

The Model 271 provides feature-packed performance and reliability for data transmission over glass fiber. Fiber optic transmission offers the benefits of wide bandwidth, immunity from EMI/RFI interference, operation in harsh/ hostile environments and secure data transmission. The Model 271 RS-232 Fiber Optic Auto Powered Line Driver provides full-duplex, asynchronous communications over two fibers. Fiber cable length can be up to 2 kilometers with data rates as high as 56 KBPS. The Model 271 has been optimized for 62/125 fiber cables. Other sizes can also be used.

#### To Order Use Model Number:

**Female Connector** 

271AF-220 (220V)

271M/ST

Male ST Connector **CE Certified** 

271F/ST

**Female ST Connector CE Certified** 



# Model 9271 - RS-232 Fiber Optic Auto Powered Line Driver with DB9 Connector



#### **Features**

- DIN Rail Mounted
- Standard DB9 Interface
- RS-232 Data Interface
- DTE/DCE Switch
- Half or Full Duplex to 56 KBPS
- 2 Kilometers on 62/125 Fiber
- Total Electrical Isolation
- Eliminates Noise Problems
- ST Connectors
- No Power Required

#### **Product Description**

The Model 9271 RS-232 Fiber Optic Auto Powered Line Driver features a standard DB9 interface for maximum performance and reliability of data transmission over glass fiber, eliminating the need for serial to nine-pin adapters. In addition, it brings effective data communications to manufacturing environments. It can be installed in applications requiring very high data transmission rates, offers resistance to Electromagnetic Interference (EMI), and it provides isolation from lightning-induced current surges and ground loops. The unit employs an RS-232 data interface, can achieve 56 KBPS asynchronously and operates in either half- or full-duplex modes over dual fibers up to 2 km in length.

#### **To Order Use Model Number:**

9271

9271A with Transformer

9271A-220 (220 V)





# Model 8277 - RS-232, RS-422, or RS-485 to Fiber Optic Line Driver



#### **Features**

- DIN Rail Version of Model 277
- Point to Point or Ring (to 10 Units)
- Data Interface Selectable RS-232, RS-422 or RS-485
- Data Rate to 1 MBPS for RS-422 or RS-485

#### **Product Description**

The Model 8277 is a unique asynchronous fiber optic modem whose optical interface can operate in either point-to-point or ring (daisy-chain) configurations and whose electrical interface can also operate in point-to-point or multi-drop configurations - depending on the user selected interface.

The Model 8277 electrical interface is switch selectable between RS-232, RS-422 and RS-485. Switch selection enables data to flow from the electrical interface to the optical transmitter or to be controlled by the Request To Send, RTS, line.

The 8277 is supplied with a power cord for the DC input. Wall-mounted adapters are optional.

#### To Order Use Model Number:

8277

# Model 8322 - RS-232 to RS-422/RS-485 Optically-Isolated Interface Converter



- **Features** 
  - Switch Selectable RS-422 or RS-485 Operation
  - Four-Wire Master/Slave Operation
  - Active Mode Control via RTS or Data
  - Opto Isolation
  - Built-in Power Supply
  - Internal Microcontroller
  - 38.4 KBPS Data Rate
  - DIN Rail Mounted
  - Programmable Terminations

#### **Product Description**

The Model 8322 RS-232 to RS-422/RS-485 Interface Converter allows information exchange in full or halfduplex mode over two twisted pair cables. This conversion is accomplished while maintaining optical isolation between the ports. Dip switches are used to select RS-232 to RS422 or RS-232 to RS-485 operating modes. The unit may be mounted on our DIN rail system. The Model 8322 includes TD and RD LED's as well as a builtin power supply. The power input is standard for 110 V/ 60 Hz or 220 V/50 Hz as an ordering option. All the inputs and outputs are via screw terminals located on the top surface of the device. A full complement of dip switches are provided to select operation mode, data rate, byte format, master/slave configuration as well as pull up and pull down resistors on all received data lines as well as terminal loads for transmitters and receivers.

#### **To Order Use Model Number:**

8322

8322-220 (220 V)

(CE Certified)



# Model 8324 - RS-232 to RS-485 Optically-Isolated Interface Converter



#### **Features**

- Break 32 Node Limit on RS-485
- Two-Wire Master/Slave Operation
- Active Mode Control via RTS or Data
- Opto Isolation
- Built-in Power Supply
- Internal Microcontroller
- 38.4 KBPS Data Rate
- DIN Rail Mounted
- Programmable Terminations

#### **Product Description**

The Model 8324 RS-232 to RS-485 Optically-Isolated Interface Converter allows information exchange in half-duplex mode over one twisted pair. It converts RS-485 signals to RS-232 signals, bidirectionally, on the DIN rail mounting system. This conversion is accomplished while maintaining optical isolation between the ports. Model 8324 allows for the extension of RS-485 links to a maximum limit of 3,300 feet or 1 km at any data rate up to 38.4 KBPS.

The Model 8324 includes TD and RD LED's as well as a built-in power supply. The power input is standard for 110 V, 60 Hz or 220 V, 50 Hz as an ordering option. All the inputs and outputs are via screw terminals located on the top surface of the device.

#### To Order Use Model Number:





# Lightning & Surge Protection/ Misc

# Model 29 - RS-232/RS-422 DB9 Lightning Suppressor



#### **Features**

- PC 386/486 Pentium COM Ports
- Nanosecond Response
- DB9 Connectors
- · Protects All Nine Lines
- Ground Stud & Wire Included

#### **Product Description**

The Model 29 contains avalanche diodes, one for each line. All diodes are returned to a ground stud. The Model 29 is provided with a two-foot ground wire and has male and female DB9 connectors. It supports RS-232 levels and is a low-cost solution to the problem of potential equipment damage from induced transients on RS-232 COM ports of 386/486 Pentium or laptop/notebook PCs.

#### To Order Use Model Number:

29

**CE Certified** 

# **Model 31 - Port Miser Port Sharing Device**



#### **Features**

- Expands RS-232 Port by Three
- Up to 19.2 KBPS
- No Power

#### **Product Description**

The Telebyte Model 31 is a passive device which attaches to a modem, printer or computer and allows up to three terminals, monitors or other input devices such as bar code readers, mag stripe units and specialized key pads to be interconnected. Semiconductor circuits are utilized to provide isolation of the prime signals in the RS-232 interface. Each port has a switch associated with it for reversing pins 2 & 3 of its respective RS-232 connector. The signals that are isolated include the selected Transmit Data Line and pins 4 & 20. Each port features a Female connector. The main port consists of a DB-25 (Male) connector for connection to a modem, printer or computer. The simplicity of the device allows for quick, simple, plug-in operation.

#### To Order Use Model Number:

31