



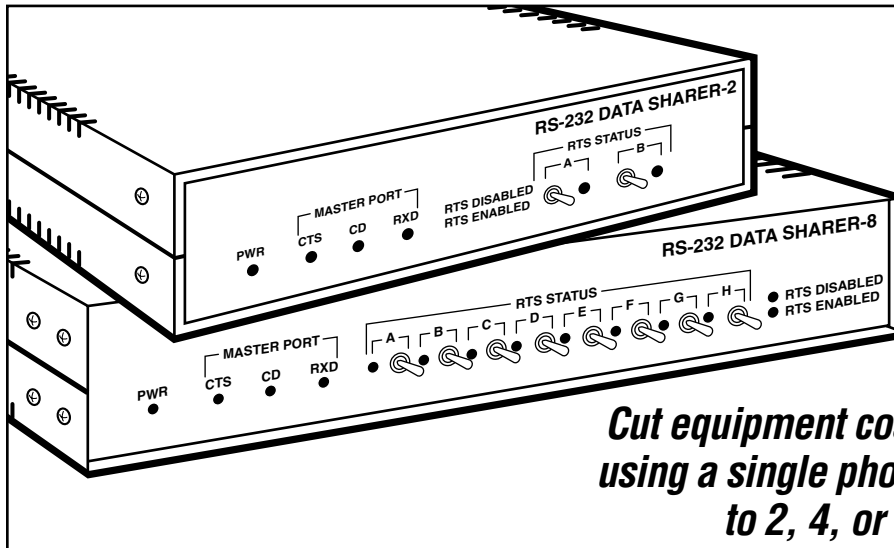
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BLACK BOX[®]

NETWORK SERVICES

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2-PORT, 4-PORT, AND 8-PORT RS-232 DATA SHARERS



Cut equipment costs and phone charges by using a single phone line and modem for up to 2, 4, or 8 RS-232 devices.

Key Features

- ▶ **Transparent to data rates up to 64 kbps.**
- ▶ **Synchronous and asynchronous data transmission.**
- ▶ **Choose either hardware or round-robin priority to select terminal ports.**
- ▶ **Front-panel switches enable and disable RTS on each input port.**
- ▶ **Jumper-selectable options include RTS delay, RXD operation, RTS-timeout period, and data-timeout signal.**

With the RS-232 Data Sharer, you save the cost of extra modems and leased phone lines for your RS-232 systems. Connect up to 2, 4, or 8 RS-232 devices to a single modem and phone line.

Depending on the size of your system, choose either a 2-Port, 4-Port, or 8-Port model. All three models feature transparent operation (up to 64 kbps) and LED monitoring.

By cascading two data sharers together, you can connect up to 15 devices to your RS-232 line.

The Data Sharers work with synchronous or asynchronous devices.

You control which ports can access the modem at any given time. Simply toggle the RTS switches conveniently located on the front panel of the Data Sharer to enable or disable RTS for a particular port. If RTS is disabled,

the Data Sharer will ignore attempts to access the modem by the device attached to that port.

The 4- and 8-Port models can be polled sequentially for RTS, or you can set a jumper to give certain ports priority over others.

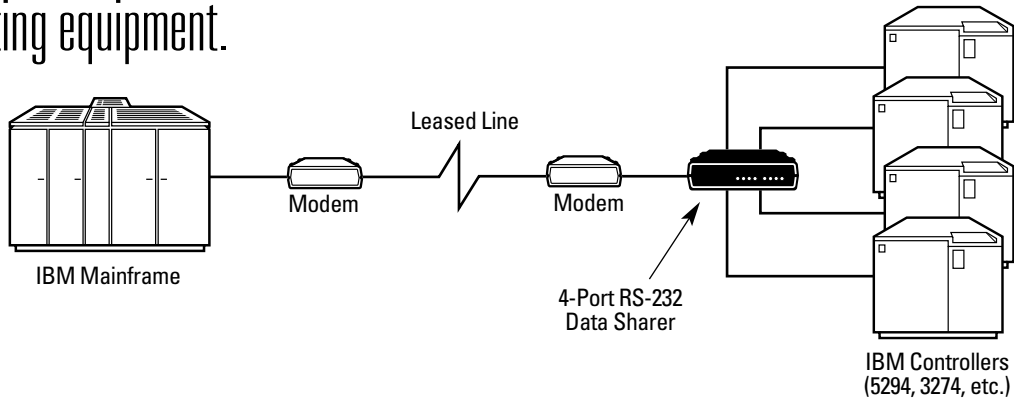
The Data Sharers work with popular IBM communications protocols, including half-duplex Bisynchronous communication and Synchronous Data Link Control (SDLC).

Typical Applications

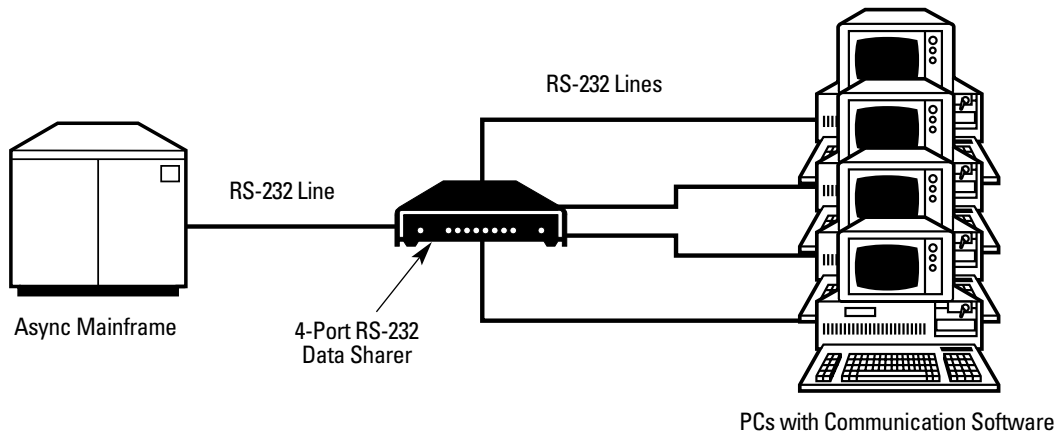
Connect the IBM mainframe at your central office to several IBM controllers at a branch office across the country.

Share one modem among several PCs in an office to connect to the async mainframe in your company's computer room.

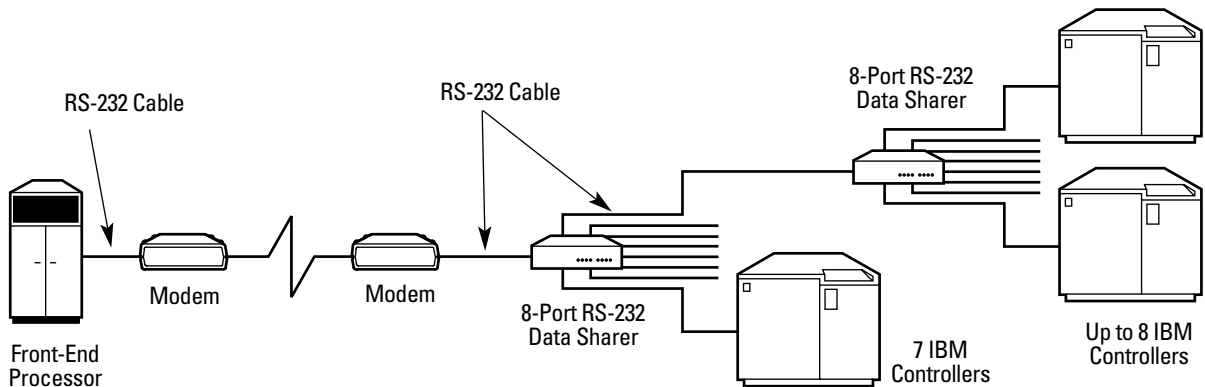
The RS-232 Data Sharer works in synchronous or asynchronous applications to adapt to your existing equipment.



Synchronous application—an RS-232 Data Sharer in an IBM® multipoint environment.



Asynchronous application—an RS-232 Data Sharer providing four PCs with access to an async host.



Connect up to 15 remote controllers to a front-end processor by cascading RS-232 Data Sharers.

Specifications

Protocol — Async or sync

Operation — Full- or half-duplex

Data Rates — Transparent to all data rates up to 64 kbps

Contention Type — RTS/CTS

User Channels — TL601A(E)-R2: 2; TL553A(E)-R3: 4; TL554A(E)-R3: 8

Clock Source — External (provided by DCE)

User Controls — Front-panel switches: RTS enabled/disabled; Jumpers: RTS Delay (0 or 25 ms), RXD Broadcast or Gated Mode; RTS Timeout Period (10 or 30 seconds or none); RTS Timeout Signal (RXD only or RXD and TXD)

Pins Supported — DB25 pins 1–10, 15, 17, 20, 22

MTBF — TL601A-R2: 180,000 hours; TL553A-R3: 95,000 hours; TL554A-R3: 65,000 hours

Enclosure — Steel

Interface — Serial EIA RS-232C/CCITT V.24; Master Port: DTE; Slave Ports: DCE

Connectors —

TL601A(E)-R2: (3) DB25 female; TL553A(E)-R3: (5) DB25 female; TL554A(E)-R3: (9) DB25 female

Indicators — TL601A(E)-R2: (6) LEDs (Power, RTS A, RTS B, Master Port CD, CTS, and RXD); TL553A(E)-R3: (8) LEDs (Power, RTS A through RTS D), Master Port CD, CTS, and RXD); TL554A(E)-R3: (12) LEDs (Power, RTS A through RTS H, Master Port CD, CTS, and RXD)

Operating Temperature — 32 to 140°F (0 to 60°C)

Storage Temperature — -4 to +158°F (-20 to +70°C)

Humidity — Up to 95%, noncondensing

Power — TL553A-R3, TL554A-R3, TL601A-R2: From wallmount power supply PS154: Input: 115 VAC, 60 Hz @ 100 mA; Output: 17 VAC CT @ 700 mA; TL553AE-R3, TL554AE-R3, TL601AE-R2: From in-line power supply PS154E: Input: 230 VAC, 50 Hz @ 50 mA; Output: 17 VAC CT @ 750 mA

Size — TL601A(E)-R2: 2.5"H x 8.1"W x 11.3"D (6.4 x 20.6 x 28.7 cm); TL553A(E)-R3, TL554A(E)-R3: 2.9"H x 12.5"W x 11.1"D (7.4 x 31.8 x 28.2 cm)

Weight — TL601A(E)-R2: 2.4 lb. (1.1 kg); TL553A(E)-R3: 5 lb. (2.3 kg); TL554A(E)-R3: 5.5 lb. (2.5 kg)

Technically Speaking

The RS-232 Data Sharer has LEDs, RTS toggle switches, and jumpers for easy configuration and diagnostics.

- LEDs include PWR, "slave port" RTS, and "master port" CD, CTS, and RXD.
- There is one RTS toggle switch for each "slave port." Use these switches to enable or disable the Sharer's detecting an RTS signal on any of the slave ports. Disabling a port's RTS detection will prevent that port's device from accessing the modem or CPU. This is useful if you want to isolate a slave device, especially if the device is malfunctioning.
- Using jumper W1, you can tie signal ground to frame ground.
- With jumper W2, you can set the amount of time you want the RTS signal to delay as it passes through the Data Sharer from a slave port to the master port.
- How you set jumper W3 determines whether the Sharer will broadcast data out of all slave ports, or out of only the active ports.
- Jumper W4 determines whether the slave ports will be (a) polled for RTS sequentially, or (b) prioritized with Port A given the highest priority and Port D or H the lowest.
- A set of "timeout" jumpers keeps a slave from monopolizing the master.

Ordering Information

ITEM	CODE
2-Port RS-232 Data Sharer (115 VAC)	TL601A-R2
2-Port RS-232 Data Sharer (230 VAC)	TL601AE-R2
4-Port RS-232 Data Sharer (115 VAC)	TL553A-R3
4-Port RS-232 Data Sharer (230 VAC)	TL553AE-R3
8-Port RS-232 Data Sharer (115 VAC)	TL554A-R3
8-Port RS-232 Data Sharer (230 VAC)	TL554AE-R3

NOTE: 115-VAC models include wallmount power supply PS154; 230-VAC models include in-line power supply PS154E