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NETWORK SERVICES

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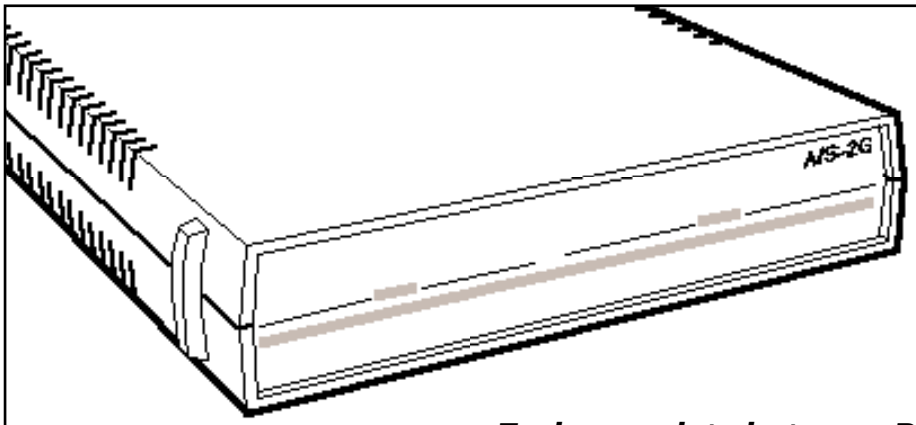
A/S-2G PROTOCOL CONVERTER (2780/3780)



Exchange data between Bisync and async devices.

Key Features

- ***Converts Bisynchronous 2770, 2780, 3741, or 3780 protocols to async, and vice versa.***
- ***Each port is DTE/DCE user-selectable.***
- ***Provides clocking via Bisynchronous port's DCE setting.***
- ***Optional transparency EPROM enables communication between Bisync and async devices that use the same language.***
- ***Standalone or board version available.***

The A/S-2G Protocol Converter (2780/3780) gives you a way for your older asynchronous and Bisynchronous devices, such as those used in RJE applications, to communicate with one another.

Available in a standalone and card version, the converter supports IBM® 2770, 2780, 3741, and 3780 protocols. This protocol converter can be used for converting, communications protocol, and transmission speed.

Use it, for instance, to transfer files between an async ASCII-coded device and a synchronous IBM mainframe host that uses EBCDIC characters. This versatile device makes the two compatible, converting the async ASCII data byte-for-byte to EBCDIC equivalents, blocking it appropriately, and wrapping it in the applicable protocol envelope.

And, because the A/S-2G is a bidirectional converter, it also does the reverse—converting sync EBCDIC data characters byte-for-byte to ASCII characters. The A/S-2G strips synchronisation characters and adds async start and stop bits.

The A/S-2G also passes special characters that have no equivalent. A command pass-through feature lets you send untranslatable EBCDIC characters unchanged to your async side.

Flexible port configuration and clocking.

You get two bidirectional RS-232 ports (one async and one Bisync/sync), labeled Port A and Port B, on the converter. You can connect either directly to a terminal, CPU, or a modem. You can configure both ports as DCE or DTE.

This versatility makes the A/S-2G particularly useful in Bisync applications where you require the converter to provide clocking. To enable clocking, simply set up the A/S-2G's Bisync/sync port for DCE operation.

And, if you're using sync modems, set the A/S-2G's Bisync/sync port to DTE.

Featuring a 6-MHz crystal for faster throughput, the A/S-2G Protocol Converter can handle 80-byte blocks and supply sync clocking at speeds up to 19.2 kbps.

What's more, each RS-232 port is speed-independent. That means the async port can run at one speed while the Bisync/sync port operates at a different speed, making a wide range of applications possible.

When configured as a DCE on the Bisync/sync side, you can attach the A/S-2G directly to your Bisync/sync host. To enable clocking, set Port B on the device for DCE operation.

Configure each port's operational parameters independently by internal DIP shunts, DIP switches, and jumpers.

You can configure parameters like echo async character, echo EOT, and more. Or set up even more options, like variable-length vs. fixed-length records, and one vs. two stop bits.

Resetting the protocol converter's microprocessor can

be done by pressing a back-panel reset button. To determine the status of a particular port, just glance at the A/S-2G's front-panel diagnostic LEDs.

Data blocking and flow control.

Some Bisync applications require data fields that are set to a specific block size. With the A/S-2G Protocol Converter, you can transmit either fixed-length or variable-length blocks. Specifically, data can be blocked in selected lengths of 80, 128, 256, or 512 characters.

On the async side, the converter supports hardware or software flow control. Choose speed, block size, and parity. In DTE mode, the A/S-2G operates under either X-ON/X-OFF or DTR/CTS flow control (in DCE mode, it operates under X-ON/X-OFF or DSR control).

Transparent EPROM version available.

You can also order by special request a modified converter version that supports transparent operation. It converts async to Bisync/sync and vice versa without changing data.

If your Bisync and async devices both speak ASCII, for example, the A/S-2G can be set to translate sync to async and simply pass the data through unchanged. The firmware on this modified version of the A/S-2G Protocol Converter performs the transparent data conversion by converting sync data to async data without translating from EBCDIC to ASCII, or vice versa.

Specifications

Approvals: FCC Part 15, Class A; CE

Flow Control: Asynchronous: X-ON/X-OFF or DTR/CTS interface lead (in DTE only); Synchronous/bisynchronous: Standard BSC handshaking

Ports: A: Asynchronous; B: Synchronous/bisynchronous

Protocol: Asynchronous: ASCII; Bisynchronous: 2770, 2780, 3741, and 3780 (EBCDIC)

Speed (Maximum): 19.2 kbps (each port independent)

MTBF: 35,000 hrs

Interface: RS-232 (both ports), DTE/DCE selectable

Connectors: (2) DB25 F

Indicators: Unit: PWR (Power); LEDs per each port: TXD (Transmit Data), RXD (Receive Data), RTS (Ready to Send), CTS (Clear to Send), DTR (Data Terminal Ready), DSR (Data Send Ready); Port A only: CDA (Carrier Detect); Port B only: CDB (Carrier Detect), TXC (Transmit Clock), RXC (Receive Clock)

Temperature Tolerance: Operating: 32 to 114ºF (0 to 46ºC); Storage: -40 to +176ºF (-40 to +80ºC)

Humidity Tolerance: Up to 95%, noncondensing

Power: External adapter: PCW224A-R4: 115 VAC, 60 Hz; PCW224AE-R4: 230 VAC, 50 Hz

Size: 2.1"H x 11.5"W x 8.8"D (5.3 x 29.2 x 22.4 cm)

Weight: 4.9 lb (2.2 kg)

Typical Applications

- Send your tax returns to the Inland revenue or forward insurance information to your clients' carriers right from your PC. The A/S-2G Protocol Converter enables you to electronically transfer information directly from your PC to any host computer running Bisync RJE protocol.

- If you're running a remote application, make sure you use the right modems. When communicating with a remote side, the modem on your end of the link must be compatible with the modem on the other end. A likely sync modem on the remote end would be a Bell 201 or 208. A likely async modem would be a V.22, V.32, V.32 bis, or Bell 212 or compatible.

Ordering Information

ITEM	CODE
A/S-2G Protocol Converter (2780/3780)	
Standalone 115-VAC	PCW22A-R4
230-VAC	PCW22AE-R4
Rackmount Board	PCW22C-R4

NOTE: For a 3780 transparent version, contact Tech Support.

For the PCW22C-R4, you may also need…

8-Card Rack RM060