DATA COMM FOR BUSINESS

ASU – Async Sharing Unit

FEATURES

- **Share one asynchronous port with 4, 8, 16, 24 or 32 other ports**
- **Share at host location or remote locations**
- **Share ports, modems, terminals, scanners, etc.**
- **Async RS-232 interface up to 38,400 bps**
- **Broadcasts from 1 port to many, concentrates many ports to one port**
- **Use for financial, traffic, POS, SCADA networks**
- **Control sharing with RTS/CTS**
- **Combiner mode in lieu of RTS/CTS**
- **Anti-streaming option**
- **Use for the DCB SCADA BPF Frad dial backup**
- **Industrial temp operation, -40° to +75° C**
- **120, 220 VAC, 12, 24, 48 and 125 VDC options**

DESCRIPTION

The DCB Async Sharing Unit (ASU) shares a single port with 4, 8, 16, 24 or 32 others. Data received on the shared common port is broadcast to all the other ports. The ASU makes it easy to share async polling networks. The ASU can be used with terminal devices, multipoint modems, point-to-point modems, DSUs, over ISDN, or over frame relay. The ASU is the ideal product for this requirement. It supports async port speeds up to 38.4 kbps.

One method of selecting ports is using terminal device RTS/CTS RS-232 control leads. The ASU constantly scans all ports for Request to Send (RTS). When a terminal device asserts RTS, the RTS signal is passed from that port to the common shared port. On the common shared port, the RTS lead is passed out to the modem. The common shared port Clear to Send (CTS) response is passed back to the terminal that asserted RTS. The connected device will send data upon receiving CTS. After the terminal device completes its transmission and lowers RTS, the scanning resumes. In the RTS/CTS control mode, data from a port is discarded if RTS is not asserted.

The anti-streaming timer option for the ASU blocks transmission from a port if that port holds RTS on for more than 8 seconds. This is useful in systems that experience "hung" ports due to terminal device RTS or modem DCD staying on in error. Turning RTS off and back on or a reset of the ASU will reset the anti-streaming timer.

The combiner mode of the ASU is perfect for polled systems that do not have RTS/CTS control. For example, many RTUs used in SCADA and other control system environments are implemented with just three RS232 leads, transmit data, receive data and signal ground. The ASU may be used at the host end of a system, where the multiple ports are connected to line drivers, modems, DSUs, etc, and where the Carrier Detect (DCD) signal is constantly on, rather than switched. In these applications, the ASU combiner mode takes all data from the ports and passes that data to the network composite without RTS/CTS control. RTS is ignored in the combiner mode.
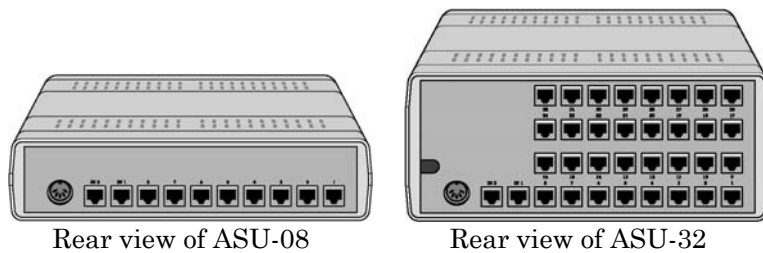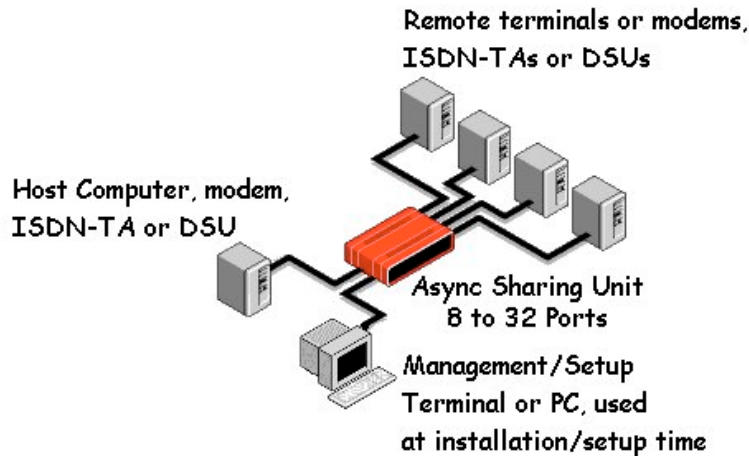
SPECIFICATIONS

General
Rates: Async port to 38.4 kbps (9.6 kbps default)
Application: Share one port with 4, 8, 16, 24 or 32 other asynchronous ports.
All ports are async RS-232
Supports data rates to 38.4 kbps

Indicators (front panel)
Power, Activity, Line Error, Modem Ready, Port 1 Setup, Loopback
Activity indicates incoming or outgoing data.
Line Error indicates an improper port speed.
Modem Ready indicates DCD on the Network port.

Controls
Front panel push button for loopback
RTS/CTS contention control or combiner mode
Anti-streaming option
Side door accessible firmware cartridge for installing firmware upgrades
Setup via the "Port One Setup", activated by the front panel push-button, or setup rear panel setup port.
Use setup to define port speeds, anti-streaming, etc.

Data Port
Interface: RS-232, V.24, speeds up to 38,400 bps
Connector: RJ-45 per EIA/TIA 561 pin outs

Physical/Electrical/Environmental
Power requirements: ASU-04 120 or 220 VAC wall transformer
ASU-08, 16, 24 and 32 100-250 VAC 50-60 Hz external supply
ASU-04, 08, 16 – 10 ¼" x 9 ¾" x 2 ¼"
ASU-16, 24, 32 – 10 ¼" x 9 ¾" x 4 ½"
Optional 12, 24, 48 or 125 VDC power
Optional rack mount assembly
Operational Temperature: -40° to +75° C
Storage Temperature: -50 to +75 C
Humidity: <95% Non-condensing

Rear view of ASU-08   Rear view of ASU-32

APPLICATION

Remote terminals or modems, ISDN-TAs or DSUs

Host Computer, modem, ISDN-TA or DSU

Async Sharing Unit 8 to 32 Ports

Management/Setup Terminal or PC, used at installation/setup time

Data Comm for Business, Inc.
2949 CR 1000 E
Dewey, IL 61840
Voice   8004DCBNET
**   (800.432.2638)**
Fax   217.897.1331
Email   info@dcbnet.com
Web   http://www.dcbnet.com