

DCB, Inc. 2949 CR 1000 E Dewey, Illinois 61840

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HDLC-Sync/Async Adapter – Model HSAA-01

- Converts HDLC-Sync data to Async
- Transports HDLC-Sync data via Async Channels
- Async speeds to 115.2 Kbps
- HDLC-Sync port to 128 Kbps
- Internal or external clock source



DESCRIPTION

The HDLC-Sync/Async Adapter performs the unique function of converting HDLC-Sync data to an asynchronous data stream for transmission through asynchronous data links. The Adapter provides <u>the</u> way to pass synchronous data over asynchronous data links such as satellites, ISM license-free radio modems, statistical multiplexers, and packetized routers. The Adapter is the opposite of the typical sync/async adapter which is designed for passing asynchronous data over synchronous data links. The HDLC-Sync/Async Adapter provides the reverse function, a more difficult requirement that was not available until the introduction of this DCB product.

Applications for the HDLC-Sync/Async Adapter include:

- Passing X.25 synchronous composite links through async modems, stat mux ports, terminal server ports, async wireless radio links, TCP/IP networks.
- Passing Frame Relay synchronous composite links through async modems, stat mux ports, terminal server ports, async wireless radio links, TCP/IP networks.
- Passing SDLC synchronous composite links through async modems, stat mux ports, terminal server ports, async wireless radio links, TCP/IP networks.
- Passing PPP synchronous composite links (routers) through async modems, stat mux ports, terminal server ports, async wireless radio links, TCP/IP networks.

The HDLC-Sync/Async Adapter is easy to set up, simple to use. Most applications can use the default settings if the async speed of 115.2 Kbps is correct for your application. There are only a few settings. One is the speed of the async composite port, ranging from 9600 to 115,200 bps (default is 115.2 Kbps). Another is the HDLC port, changing from NRZ (default, typical for Frame Relay and X.25) to NRZI (used for SDLC applications, although SDLC will operate in NRZ mode). A terminal port is selected to accept terminal clock, or a port is selected and a synchronous speed is set if the HSAA is to supply the clock.

The HSAA can be used with the DCB EtherPath or the DCB EtherPoll unit to pass the HDLC synchronous data through TCP/IP networks. The EtherPath and EtherPoll units convert the RS232 asynchronous output of the HSAA to Ethernet. The EtherPath packages the data in TCP/IP. The EtherPoll packages the HSAA data in UDP packets. The EtherPoll option is more appropriate if the HDLC protocol cannot tolerate the possibility of duplicate HDLC packets, which can happen due to the error correction function of TCP/IP.

The HSAA is temperature rated for operation from –40 to +70 C. This makes the unit ideal for harsh environments. The HSAA is also available with DC power options for 12, 24, 48 and 125 volts. The 12, 24 an 48 volt options are internal to the HSAA. The 125 volt DC option is an external supply.



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SPECIFICATIONS

General

All ports are RS-232, implemented in RJ-45 8-wire connectors Async Composite rate: 115.2 Kbps default, 9600, 19200, 38400, 57600, 115200 bps Synchronous HSAA internal clock rates: 9600, 19200, 38400, 57600, 115200 bps Modem CTS to HSAA-01 BUSY flow control on the async composite Sync port to 128 Kbps with terminal supplied clock rates Defaults to NRZ, NRZI option Application: Point-to-point

Controls and Indicators

Front panel push button for loopback and reset Front panel push button for Terminal or HSAA supplied clock Side door accessible firmware cartridge for installing firmware upgrades Setup via the rear panel NMP management port Power, Activity, Line Error, Modem Ready, Setup, Loopback LED's The HDLC port not used for the sync terminal is the management port-Front panel button is used to select HSAA internal or terminal clock

Physical/Electrical Power requirements: 120 VAC, wall mount power Supply DC options for 12, 24, 48 and 125 volts Operating Temperature: -40 to +70 C 60 Hz. 18 Watts 0 10 1/4" x 9 3/4" x 2 1/4" One pound Application Async Link via modems, stat mux, Sync Device wireless radio link, etc running HDLC Protocol HDLC-Sync/Async Adapter HDLC-Sync/Async Adapter Sync Device running HDLC Protocol (X.25, Frame Relay, SDLC, etc)