

module

Communication Interface

PRODUCT BRIEF

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FEATURES

- INPUT/OUTPUT AS STANDARD 20 mA SIGNALS, TTL SIGNALS, AND EIA RS-232C (CCITT V.24) SIGNALS
- 15 TRANSMISSION SPEEDS FOR TRANSMIT AND RECEIVE FROM 50 TO 9600 BAUD
- ON/OFF CONTROL OF PAPER TAPE READER OR TTY MOTOR
- MODEM CONTROL SIGNALS
- PROGRAMMABLE ECHO
- OPTIONAL 128 CHARACTER FIFO BUFFERS FOR INPUT AND OUTPUT
- PARITY GENERATION AND CHECKING
- SELECTABLE CONTROL CHARACTER RECOGNITION

APPLICATIONS

- INTERFACE FOR A TELETYPEWRITER
- INTERFACE FOR A CRT TERMINAL
- INTERFACE FOR MODEM COMMUNICATION LINK
- DATA LINK BETWEEN TWO CAMAC SYSTEMS
- INTERFACE FOR CHARACTER ORIENTED SERIAL EQUIPMENT

GENERAL DESCRIPTION

The Model 3340 is a single-width CAMAC module that interfaces the CAMAC Dataway directly to terminals, teletypewriters, modems, printers, etc. Characters are transmitted and received as 20 mA and TTL signals on one front-panel connector and EIA RS-232C on the other front-panel connector. Fifteen data rates are available: 50, 75, 110, 134.5, 150, 300, 600, 1200, 1800, 2000, 2400, 3600, 4800, 7200, 9600 Baud. Input and output data rates are independently adjustable via board-mounted switches. The number of data bits in a character is switch-selectable from 5 to 8. Another switch option allows the choice of 1 or 2 stop bits. Parity error checking is also switch-selectable.

A relay control signal is provided. This can be used to provide on/off control for a paper tape reader, a teletypewriter motor, or other load. The output is open collector and can drive loads up to 24 volts and 100 milliamps. A fused +24 volt output is provided for use with this circuit. Modem control flags are provided for establishing an automatic communication link through a modem via the EIA RS-232C connector.

Optionally, two 128 character buffers can be provided, one for input and one for output. These buffers allow the data to be transferred a block at a time rather than character by character. Under program control the input can be echoed back to the output as well as to the computer.

End-Of-Block characters are selected for input and output (8 switches for input and 8 switches for output). The End-Of-Block character detection is enabled and disabled by command.

On output block transfers, the buffer is filled by doing Write commands until $Q = 0$ is detected. A $Q = 0$ response means that the output buffer is full or the End-Of-Block character was written. The module will then transmit the block of data at its selected Baud rate until the output buffer is empty.

On input block transfers, the input buffer is filled and a LAM is set, meaning that the input buffer is full or the End-Of-Block character has been written into the input buffer. The LAM is detected by the computer, and it reads the input buffer until $Q = 0$ is detected. A $Q = 0$ response means that the input buffer is empty or that the End-Of-Block character has been read.

