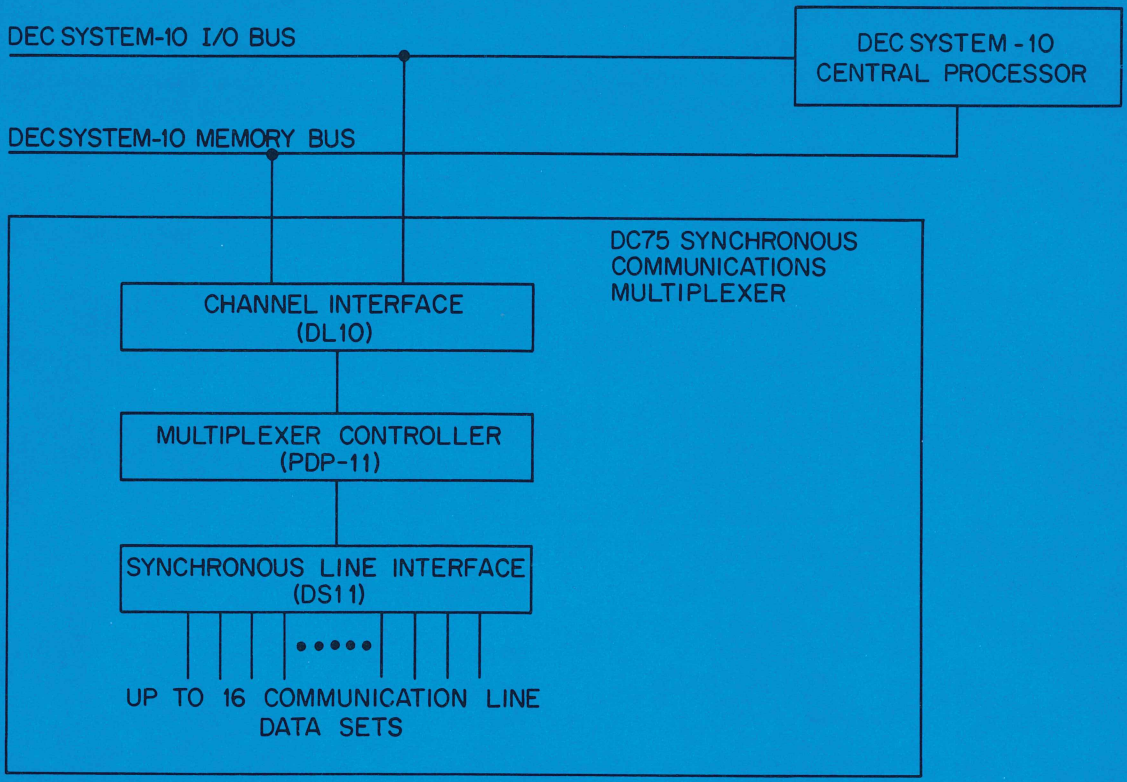


# decsystem10

OPTION BULLETIN

## DC75 Synchronous Communications Multiplexer



## FEATURES

- 8 full-duplex synchronous lines
- Speeds of 2,400; 4,800; 9,600 bps
- Total capacity of eight 4,800 bps lines
- Provision for adding up to four controllers, with each controller driving scanners for up to 64 synchronous lines

The DC75 Synchronous Communications Multiplexer provides a highly reliable, high-speed path between the central DECsystem-10 computer and remotely located batch stations or other computer systems. Transmission over high-speed synchronous lines is on a message basis rather than the character-by-character method of low-speed asynchronous transmission.

Recommended for applications involving multiple synchronous lines, special remote devices or high data rates, the DC75 system handles a traffic load of approximately 10,000 characters per second, including error checking, formatting and line control. The DC75 consists of a high-speed interface to the DECsystem-10 memory bus (DL10), minicomputer (PDP11) multiplexer controller, and a multiple line synchronous interface (DS11). The multiplexer controller packs and unpacks characters directly into the DECsystem-10 memory and can execute instructions from the -10 memory for bootstrap operations. The multiple line synchronous interface handles 8 full-duplex lines and can be expanded to handle up to 16 full-duplex lines. The multiplexer hardware may be programmed to handle character sizes of 6, 7, 8, and 12 bits and may be

programmed to recognize a variety of synchronous codes in full- or half-duplex operation. Standard system software supplied with the DC75 operates in full-duplex mode using 8-bit characters.

Data transmission takes place in both directions simultaneously without interfering with the DECsystem-10 processor. Idle characters are automatically transmitted.

Modems (not supplied by Digital Equipment Corporation) should meet the EIA-RS232-C standard and be equivalent to Bell 201 or 203 modems.

## COMPONENTS

**DC75 SYNCHRONOUS COMMUNICATION SYSTEM:** provides direct memory interface for full-duplex synchronous lines. Total throughput capacity is 40KB; i.e., four lines at 9600 Baud or eight lines at 4800 Baud. The DC75 provides eight lines and connects to a memory access port. (Prerequisite is a DECsystem-10)

**DC75D EXPANDER OPTION FOR DC75:** provides an additional 40KB throughput capacity for a DC75; i.e., eight additional lines at 4800 Baud. Up to three DC75D's can be added to one DC75. (Prerequisite is a DC75)

**DC75E INCREMENTAL EIGHT-LINE GROUP FOR DC75 or DC75D:** provides up to eight additional lines on a DC75 or DC75D for a total of up to 16 lines. The DC75E does not increase the throughput capacity of the DC75; it remains at 40KB; i.e., 16 lines at 2400 Baud. Only one DC75E can be added per basic DC75 or DC75D. (Prerequisite is a DC75)

## SPECIFICATIONS

	Multiplexer (PDP11)	Memory Bus Interface (DL10)	Synchronous Line Interface (DS11)
Voltage	115 or 230 VAC	115 VAC	115 or 220/240 VAC
Current			
Operating	4.8A @ 115V 2.4A @ 230V	13.4A	8A @ 115V 4A @ 220/240V
Surge	10.8A @ 115V 5.4A @ 230V		
Power (Watts)	500 Watts	1545 Watts	920 Watts
Heat (BTU's/hour)	1880 BTU's/hr.	5260 BTU's/hr.	3150 BTU's/hr.
Dimensions			
Height	10.5 in.* 0.26m	69.0 in. 1.75m	69.0 in. 1.75m
Width	19.0 in.* 0.48m	31.8 in. 0.80m	22.0 in. 0.56m
Depth	23.0 in.* 0.58m	27.0 in. 0.69m	29.0 in. 0.72m
Weight	90 lb. 41 kg.	600 lb. 272 kg.	260 lb. 118 kg.
Operating Temperature	60° to 95° F 15° to 35° C	60° to 95° F 15° to 35° C	60° to 95° F 15° to 35° C
Storage Temperature	40° to 110° F 5° to 45° C	40° to 110° F 5° to 45° C	40° to 110° F 5° to 45° C
Relative Humidity	20% to 80%	20% to 80%	20% to 80%

\* PDP-11 resides in DS11 rack but is shipped separately.

Note: DECsystem-10 Sales Engineering or DECsystem-10 Marketing should be contacted when configuring multiple DC75 systems.