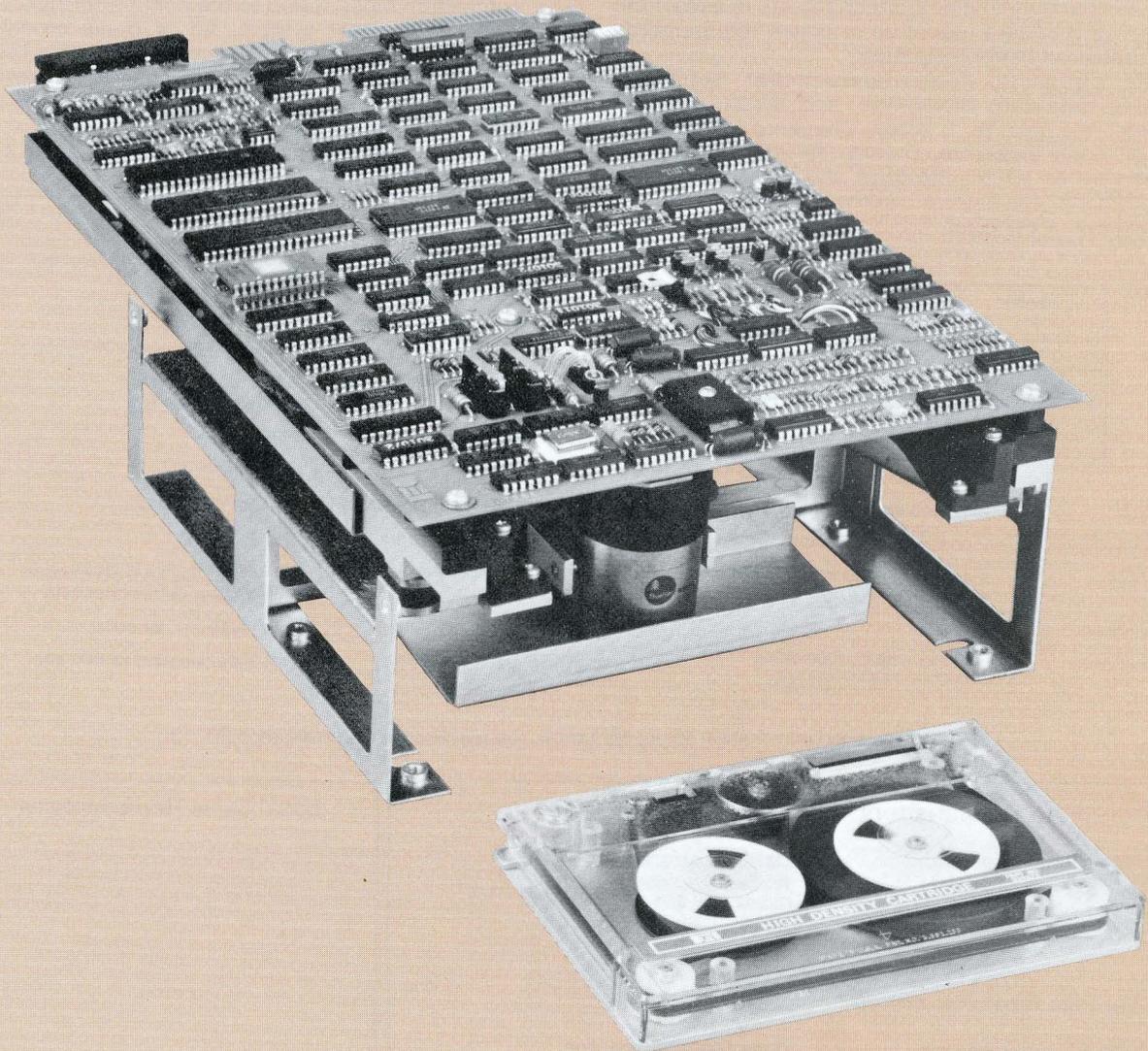# THE STREAMER

10 and 20 MBYTE CARTRIDGE MAGNETIC TAPE DRIVES
with STREAMING FORMATTER/CONTROLLER

DEI DATA ELECTRONICS INC.

FIRST IN CARTRIDGE TAPE DRIVES

GENERAL DESCRIPTION

Fixed disk drives require removable media backup systems that provide a save-and-restore function. "Streaming" ¼" Cartridge Magnetic Tape Drives from DEI are the ideal back-up choice for systems designers.

The streaming drive allows essentially all of the available tape in the cartridge to be used for data storage by eliminating the traditional starting and stopping between data blocks and the associated interblock gaps. By eliminating the gaps, the data is recorded in what appears to be a continuous stream on the tape using a serpentine track arrangement (i.e., no rewind between tracks, with full read-while-write data verification).

In addition, because starting and stopping becomes very infrequent, tape speed can be increased with a resultant increase in transfer rate. Streaming also eliminates the necessity for rapid start/stop servo electronics and mechanics, which results in a real cost savings as well as a reduction in power requirements and associated heat dissipation.

DEI's streaming formatter/controller separates incoming data into blockettes, and inserts internal address, resync, and error checking characters between each blockette. During the write mode, the data is verified within the drive and marginal data is rewritten without stopping the tape. In the read mode, the extra characters are stripped, and only data is returned to the host.

When examined, the streaming controller interface looks like a semiconductor memory element. The Streamer may be thought of as a nonvolatile first-in/first-out (FIFO) memory that can easily be integrated into a system. Complex timing and data handling requirements are eliminated.

Systems integration is also enhanced by the Streamer's industry standard dimensions that allow it to mount in the same space as a flexible disk drive using standard mounting hole locations.

There are several models from which to choose: 10 or 20 megabyte formatted capacity, and 30 or 90 kilobytes per second transfer rates. This range of models allows the system designer to choose the back-up subsystem most suited to the cost/performance objectives of the host system. All of these models have identical interfaces and dimensions, providing for maximum systems flexibility and upward compatibility.

Streaming Cartridge Magnetic Tape Drives from DEI offer a flexible, low cost/high performance, easily adaptable solution to your fixed disk back-up requirements.

SPECIFICATIONS

MODELS:

Series No.	Capacity (Mbyte)	Transfer Rate (Kbytes/s)
7130	10	29.3
7190	10	87.9
7230	20	29.3
7290	20	87.9

Cartridge: ANSI X3.55-1977, (450')

Recording Mode: 2 or 4 Track Serpentine

Head Type: Dual Gap, Read-While-Write with Separate Erase

Tape Cleaner: Integral

Temperature: +5°C to +45°C Operating
−30°C to +60°C Storage

Relative Humidity: 20% to 80% Non-Condensing

Weight: 5.0 lb (2.3 kg)

Dimensions: 8.57" x 4.52" x 14.06"
WxHxD (21.76 cm x 11.5 cm x 35.71 cm)

Voltage Requirements: + 24 Vdc (1.25 amps),
+ 5 Vdc (2.0 amps)

MTBF: >3500 hours

MTTR: <30 minutes

Recording Density: 7500 bpi (2950 bpcm)

Capacity (Formatted): 10 or 20 Mbytes

Transfer Rates: 235 kbits/sec (29.3 kbytes/sec) or
703 kbits/sec (87.9 kbytes/sec)

Interface: Byte Parallel or bit serial

Data Reliability: Less than one error in 10^{10} bits

For more detailed information on the Streamer, request Product Specification 307130

For information on the complete line of DEI Drives and systems, send for DEI's Short Form Catalogue.

DEI **DATA ELECTRONICS INC.**