DIGITAL MAGNETIC TAPE UNITS

MAGNETIC TAPE UNITS for the RECOMP II general purpose digital computer dramatically expand the RECOMP II memory and its areas of application. Each magnetic tape unit will store up to 1,000,000 words on a single 3600-foot reel, vastly extending the scope of scientific computation and data reduction capabilities. Up to four units may be used with a RECOMP II computer.

RECOMP MAGNETIC TAPE UNITS automatically read, write, and search blocks of tape by means of instructions programmed with the computer. Each unit reads 1850 ch/sec, at a tape speed of 9.25 inches per second...searches and rewinds 55.5 inches of tape per second, with optional 200 inch-per-second rewind capability. Pulse packing density is 200 characters per inch. One unit will read or write on tape an entire computer memory in 20 seconds.

FEATURES INCLUDE COMPLETE push-button control, variable length blocks, bi-directional fast start-stop, and erasure control. Built-in parity checks provide immediate verification of reading and writing. The units are compatible with other computer equipment using binary format. They are low-cost and require no external buffer purchases.

MAGNETIC TAPE—the fastest, most efficient, economical method of handling and storing large volumes of data—facilitates RECOMP II operations. It expands capacity to handle problems of virtually any complexity, and increases versatility and output of the computer and associated equipment. The high-speed units reduce tape costs, tape storage space, tape handling, and computer time. RECOMP MAGNETIC TAPE UNITS offer solid-state reliability and extensive field experience for operational dependability and precision tape handling.

Expands RECOMP II memory up to 4,000,000 words
LOW COST, HIGH-SPEED, AUXILIARY STORAGE

FLEXIBLE
Variable-Length Blocks
Tape Updating Ease
IBM Binary Format Compatibility
Bi-Directional Rewind
11 Operations, 3 Simple Commands
No Conversion Equipment Needed
One to Four Units Optional

ACCURATE
Tape Flaw Bypass
Tape-Erase Control
Fail-Safe Write Inhibitor
End-of-Tape Sensing
Read/Write Parity Check

SIMPLE TO OPERATE
Illuminated Push-Button Controls
Quick-Change Reels
Fast Threading
Manual or Automatic Operating Modes

RELIABLE
Smooth Start, Positive Braking
Unobstructed Access for Preventive Servicing
Plug-In Circuitry for Minimum Maintenance
Transistorized Reliability
APPLICATIONS

PERMITS

- Searching, sorting and merging of large amounts of data
- Accelerated program debugging
- Handling of large matrix operations and data reduction problems
- Condensing of vast amounts of information onto small, easily stored reels
- Communication with binary computers
- Tape feeding of line printers, data plotters, and digitally programmed tool and process machines

STORES

- Master files
- Historical data subject to repetitive use
- Machine language programs, automatic programs, lengthy routines
- Volumes of raw data in linear programs, statistical routines, etc.
- Computations with large amounts of intermediate results or data
- Computation results to be read back on demand

EXPANDS

- Computer capabilities in scientific and industrial data reduction
- Scope of engineering computers into areas of management sciences
- Scheduling, inventory control, financial forecasting, file maintenance, quality control, and record processing
SPECIFICATIONS

STORAGE CAPACITY
1,000,000 words on 3600-ft. reel
680,000 words on 2400-ft. reel

RECORDING DENSITY
200 characters/inch

TAPE SPEEDS
Read/Write—1850 characters/second
Read/Write—9.25 inches/second
Search and Rewind—55.5 inches/second
(bi-directional)
Fast Rewind (optional)—200 inches/second
Start/Stop—less than 5 milliseconds

INFORMATION FORMATS
7-channel RECOMP (5 information bits, 1 block mark bit, and 1 parity bit per character); 7-channel
IBM binary (6 information bits and 1 parity bit per character); odd bit parity in both formats

BLOCK LENGTH
RECOMP format—512 to 4096 characters in
increments of 512 characters; IBM format—384 to 3072
characters in increments of 384 characters

REEL TYPE
10½ inch with standard IBM hub type

TAPE LENGTH
Up to 3600 feet

TAPE CHARACTERISTICS
Mylar, ½ inch wide

ERASURE CAPABILITIES
Erase varying length blocks, whole tape, or manual erase.

COMPONENTS
Tape Transport, Control Unit, 7-channel dual type
Read/Write Head and Amplifier, and Drive Electronics
—housed in a single cabinet

SIZE
28 inches wide x 26 inches deep x 64 inches high

WEIGHT
Approx. 650 lbs.

POWER REQUIREMENTS
115-volt, 60-cycle, single phase, 15-amps (per unit)

OPERATING AMBIENT TEMPERATURE RANGE
60°F to 105°F

COOLING
Self-contained

Note: To assure you the best possible equipment,
Autonetics Industrial Products reserves the right
to change specifications at any time.