

9-TRACK TAPE DRIVES REPLACED WITH DISK

Plug-Compatible Replacements for Tape Drives with Pertec or STC Interface:

- Pertec
- STC
- Control Data
- DDC
- STK
- Overland
- Kennedy
- DEC
- IBM
- Thorne
- HP
- Digi-Data
- Cipher
- M4
- Telex
- Fujitsu
- Qualstar
- IDT

NEW capabilities in Data Storage:

- Fast, Random Access to Files
- Appears to the Host as one Large Tape
- Store Multiple 1/2-inch Tapes on a Single Disk, e.g. 5 to 10 Reels of Tape on a 128 MB MO Disk
- Unattended Backups
- No Alignment Necessary
- Virtually Maintenance Free

Featuring:

- No Software Changes Required. Easy to Install.
- Available with Magneto Optical (MO), JAZ, and Disk; other Disk and Tape Devices Available
- Universal 3-1/2 inch high enclosure; can be used as rack mount or table top.
- Tape Transfer Rate Selectable 50 to 576 KB/sec
- 10 or more years Safe Archives
- Light Weight / Low Power / Reliable

INDUSTRY STANDARD INTERFACE

The TES-1 replaces most tape drives that use the industry standard Pertec interface. The TES-2 replaces tape drives with the STC/STK interface. These units can directly replace drives from Kennedy, M4, Telex, STC, Control Data, DDC/Pertec, Cipher, Digi-Data, DEC, IBM, HP, Thorne, and many others.

EASY INSTALLATION

No hardware or software modifications are required to use the latest removable media drives in place of 1/2-inch tape units. Unplug the existing tape drive and install the TES, using a cable adapter. Installation requires no changes to the diagnostics or operating software.



The TES Tape Emulation System replaces old tape drives with convenient MO disk storage. The TES has attachable mounting ears or rubber feet which allows for either rack mount or table top configuration. The 3-1/2" high enclosure will support a CRT monitor so it can also be used at the operator console.

FAST ACCESS to DATA

Files are stored on a disk, so individual files can be accessed quickly without spooling through a long tape. With many controllers, seek times are measured in milliseconds, rather than minutes. To the host system, the TES disk appears as a single, very long tape. Since the TES can store numerous reels of tape on a single disk, there is no need to change reels, making access to data both convenient and rapid.

ARCHIVES

With many reels of tape stored on single disk, the TES makes a perfect archival device for large file systems. For convenience, the TES is offered with a variety of output devices. With the right device capacity, a complete system backup can fit on one cartridge. One operating system task can perform an unattended backup of the entire file system.

Modern removable media is highly reliable, rugged, and lower in cost than many other storage approaches. The well deserved popularity of disk drives insures availability long into the future, with steadily declining media prices.

REDUCED POWER and RACK SPACE

The TES uses substantially less power and is significantly smaller and much lighter than the tape drive it replaces. Rack space requirements are reduced by 75% or more.

SPECIFICATIONS

INTERFACE

TES-1: Pertec interface, with Parity selectable. Centronics 50-pin connectors with 50-pin card-edge adapters supplied.
 Tape Unit ID 0-7, internal switch selectable
 Pertec Commands Pertec interface command set.

TES-2: STC interface. 60-pin card-edge connectors supplied.
 Tape Unit ID 0-3, internal switch selectable
 STC Commands STC interface command set.

ANSI compatible PE1600 BPI, PE3200 FCI, NRZI 800 BPI, and GCR6250 CPI.

Ramp Time 1 to 16 ms, internal switch selectable
 Block Size 64 KBytes maximum
 Control/Maintenance RS-232 serial port, ASCII, rear panel DB-9 connector.

INTERNAL SCSI BUS

Interface Asynchronous, single-ended
 SCSI ID Selection Automatic

TRANSFER RATE

50 KBytes/sec to 576 KBytes/sec, internally switch selectable

CACHE BUFFER

256 KBytes

LOAD TIME

5 sec typical

REWIND TIME

Less than 1 sec for MO, JAZ, and SCSI disk.

RELIABILITY

MTBF 100,000 to 250,000+ hours
 MTTR 15 minutes
 Bit Error Rate 1×10^{-12}
 Media Virtually error free
 Media Life 10 to 25+ years, estimated

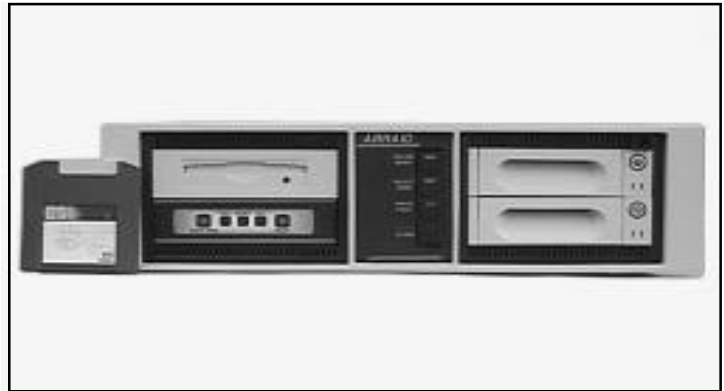
POWER

Input Voltage 90 - 265 VAC (Auto-sensing)
 Frequency 47 - 63 Hz
 Power 25 Watts (Typical)

PHYSICAL

High x Wide x Deep, Weight
 Desk Top / 3.5 in. x 16.9 in. x 10.75 in., 15 lbs
 Rack Mount 89 mm x 429 mm x 273 mm, 6.8 kg

Specifications subject to change without notice.



The TES (l) with a Magneto Optical drive in a 5.25" rack mount enclosure, combined with the AEM (r) Drive Emulation System that replaces numerous SMD, cartridge, and HSI Hard Disk Drives. MO disks are available in 128 MB, 230 MB, and 540 MB capacity to match the storage needs.

VERSATILE CONFIGURATIONS

The TES is modular and available with either the MO drive, or larger capacity JAZ or disk drives. It can be supplied with a modern DAT or QIC tape unit for up to 43 GB of storage. The TES can also share an enclosure with Arraid's AEM-1, SMD Drive Emulation System. The AEM-1 will replace numerous SMD and cartridge disk drives while providing a host of additional features and performance upgrades. (See AEM-1 brochure for more details)

AVAILABLE DRIVE OPTIONS

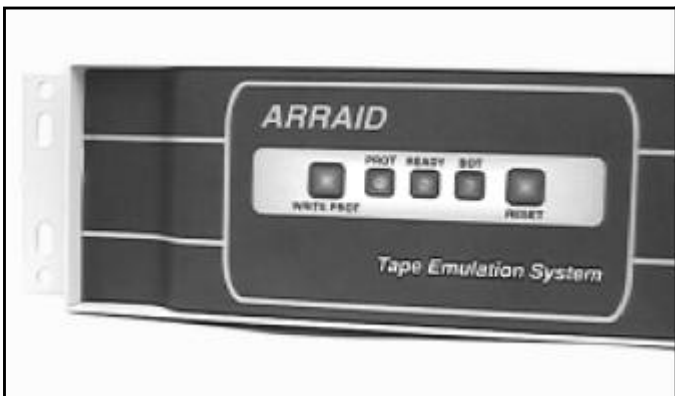
DRV-05MC	128 to 540 MB Magneto Optical Drive
RDC-01M	128 MB MO Cartridge, box of 10
RDC-02M	230 MB MO Cartridge, box of 10
RDC-05M	540 MB MO Cartridge, box of 10
DRV-05QC	500 MB QIC Tape Drive
DRV-20DC	2 GB DAT Tape Drive
DRV-20JC	2.0 GB JAZ Drive
DRV-40R	4 GB Removable Hard Disk Drive
DRV-52MC	5.2 GB Magneto Optical Drive
DRV-90R	9 GB Removable Hard Disk Drive
DRV-430QC	43 GB QIC Tape Drive

All removable-media drives include 1 disk or tape cartridge.

Other models and options available on request.

RELIABILITY

The TES carries a 1 year warranty and uses the latest technology MO, JAZ, or other drives for low maintenance operation. Drives may carry a longer manufacturer's warranty and are rated from 100,000 to 250,000 hour MTBF. The media has a limited lifetime warranty. Magneto Optical media shelf life is currently estimated at 25 years and may exceed 50 years.



The TES is easy to operate. Insert a disk, and it will rewind and bring the unit on-line. BOT and READY will illuminate, indicating the TES is ready for operation. Rewinding is accomplished by pressing RESET, which brings it to load point and places it back on-line. To activate WRITE PROTECT, press the switch and the indicator will illuminate.