

TSV05-S Industry-Standard Magtape for BA200-Series Enclosures

digital



Worldwide Data Interchange for the MicroVAX/VAXserver 3500/3600 Series

The TSV05-S is Digital's lowest-cost ANSI, industry-standard magnetic tape drive compatible with the MicroVAX/VAXserver 3500/3600/3602. Data on the TSV05-S can be interchanged with any system that uses half-inch, 9-track, 1600-bits-per-inch, phase-encoded format.

Highlights

- Comes standard with 12-month warranty.
- Meets standards for worldwide data interchange.
- Loads from the front and threads automatically.
- Fulfills data-interchange needs for government, business, science, and industry.
- Features a new controller that plugs directly into bulkhead distribution panel of MicroVAX/VAXserver 3500/3600 series.
- Meets Digital's rigid quality and reliability standards.

MicroVAX/VAXserver 3500/3600

Compatibility

The TSV05-S Tape Subsystem brings all the benefits of worldwide data interchange to the MicroVAX/VAXserver 3500/3600 series CPUs. The subsystem contains a TS05 tape transport and an enhanced controller designed especially to mate to the unique MicroVAX/VAXserver 3500/3600 distribution panel.

Configured with the MicroVAX/VAXserver 3500/3600, the TSV05-S mounts in the top of a stand-alone, 40-inch cabinet. This arrangement provides convenient top access for tape-head cleaning.

Configured with the VAXserver 3602—which provides two MicroVAX 3600 CPUs in adjacent cabinets—the TSV05-S can be integrated as an option in the top of the second cabinet, above the CPU. The two CPUs of the VAXserver 3602 are dual ported to a single RA82 in the top of the first cabinet. Choosing the TSV05-S makes the VAXserver 3602 a compact dual-CPU system with both disk and tape storage.

The TSV05-S is also available to support the PDP-11/53, -11/73, -11/83, Micro PDP-11/73, and MicroVAX II. The unit can also be custom rack-mounted to fit your own configuration.

Worldwide Data Interchange

Perhaps the most important feature of the TSV05-S magnetic tape subsystem is its worldwide data interchange capabilities. For many years, 1600-bits-per-inch, 9-track, phase-encoded, 0.5-inch, ANSI-compatible tape drives have been the industry standard—accepted by users and adopted widely by the computer industry. As a result, the TSV05-S allows

efficient data interchange between all your Digital and non-Digital systems that use the same industry-standard format.

Front Loading, Self-Threading Make the TSV05-S Easy To Use

The TSV05-S features a unique front-loading, self-threading design that makes tape mounting as easy and fast as loading a floppy disk. Open the access window, insert the tape reel, close the window, and press the LOAD button. The drive automatically seats the reel and threads the tape. If the tape fails to load properly, a microprocessor detects the error; the drive then automatically reloads without operator intervention. Complicated, time-consuming, manual threading procedures are eliminated.

The TSV05-S makes routine service and maintenance simple, too. The cabinet top pops open and the entire tape transport tilts up, exposing the tape formatter module and other components for easy access. The TSV05-S is fully supported, worldwide, by Digital Field Service.

Government, Commercial, Scientific, and Industrial Applications

By meeting the phase-encoded (PE) standards for recording and the ANSI-standard dataset format, the TSV05-S meets the requirements of a number of applications:

Business—For submitting payroll records to the Internal Revenue Service.

Banking—For recording import-export, credit-card, and interbank transactions.

Engineering—For transferring CAD/CAM/CAE and ATE system input.

Government—For recording military and civilian government agency data, such as census information.

Marketing—For transferring promotional mailing lists.

Software Distribution—For distributing software—as a low-cost, easy-to-transport, high-capacity alternative to floppy disks.

Archiving and Software Distribution

Because the TSV05-S can store up to 40 megabytes of formatted data when using an 8K blocking factor, it is an excellent choice for localized archiving. By offloading the record-keeping task from your system disk, the TSV05-S can enhance the productivity of your system at the lowest possible cost. Indeed, for offline data storage, the large capacity and low cost of magnetic tape makes it an economical storage medium.

Designed for the Office Environment

The TSV05-S economizes on space, occupying only nine inches of a standard 40-inch cabinet. Configured with a VAX-server 3602, or rack-mounted in a customer cabinet, the TSV05-S becomes an integral part of the system, requiring no extra floor space.

Because the TSV05-S operates at a low noise level, features easy front-loading operation, and can be configured to economize on space in a work-surface-height cabinet, it is an ideal subsystem for the office.

High Reliability and System Uptime

The TSV05-S is a proven product, engineered and tested to meet Digital's demanding quality and reliability standards. Each subsystem comes with a full one-year warranty.

Microprocessors in the tape transport and the interface assure the TSV05-S's reliability by performing quality checks on your data. The microprocessors and interface perform continuous online microdiagnostics to verify your system's integrity. Should a failure occur, even in standby mode, the microprocessors respond immediately. A special set of internal diagnostics also run each time you power up the transport, providing fault-isolation information.

A Selection of Reel Sizes

Up to 40 megabytes of formatted data can be stored on the industry-standard 10.5-inch reel. Smaller reel sizes—as small as 7 inches—also fit in the TSV05-S, so you can choose the size best suited to your job requirements.

The 1600-bits-per-inch density on 9 tracks results in a peak data transfer of 40 kilobytes per second while reading or writing data at 25 inches per second. Accurate tape position data is always available, so ANSI-standard tapes can be read and written properly.



For additional information on the TSV05-S, contact your local Digital sales office or call 800-832-6277 within the continental United States.

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Specifications

Performance

Read/Write Speed	25 in/sec
Disk Backup	25 in/sec
Rewind Speed	180 in/sec (max)
Maximum Data Transfer Rate	40 or 160 Kbytes/sec
Capacity (2400 ft/10.5-inch reel)	
Unformatted	46 Mbytes
Formatted 8K records	40 Mbytes
Drives/Controller	1
Q-bus controller (supplied)	1 quad module

Data Recording

Method	Phase Encoded (PE)
Density	1600 bits/in
Number of tracks	9
Tape width	0.5 in
Reel diameter	7 to 10.5 in
Compatibility	ANSI-standard x 3.39

Physical Characteristics

Dimensions:	Height	Width	Depth
Tape Transport	8.75 in (22.23 cm)	19.0 in (48.26 cm)	24.25 in (61.60 cm)
Cabinet	43.75 in (111.13 cm)	23.5 in (59.69 cm)	33.0 in (83.82 cm)

Weight:

Transport	80 lb (36 kg)
Transport with Cabinet	265 lb (121 kg)

Installation

Cabinet/Rack-mountable	Installed in a stand-alone cabinet, or in standard 19-inch rack, or integrated into the second cabinet of the VAXserver 3602. (May require additional hardware.)
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Environment

Temperature:	
Operating	59 to 90°F (15 to 32°C)
Nonoperating	-40 to 151°F (-40 to 66°C)
Humidity:	
Operating	20% to 80% (noncondensing)
Nonoperating	15% to 95% (noncondensing)
EMI Performance	Meets FCC Class A specifications