

CALCOMP

CALCOMP

TRIDENT T-25 DISK DRIVE

CalComp's T-25 member of the TRIDENT family of disk drive units is a high speed, random access mass storage unit with a capacity of 27.4 million 8-bit bytes of data. Stored on a five-high removable disk pack, data is transferred at a rate of 806 kilobytes per second.

The T-25 incorporates 185 tracks-per-inch technology and has an average rotational latency of 8.3 milliseconds. Access to any one of the 408 cylinders is

accomplished in a maximum of 6 msec with an average positioning time of 30 msec.

The T-25 reaches operating speed in less than 20 seconds and is dynamically braked in 20 seconds. Using existing technology in an optimal manner, the TRIDENT family offers the OEM designer an economical, compact, reliable unit with many advanced features.

T-25 FEATURES

SINGLE COMPACT SELF-CONTAINED UNIT allows flexibility for low-boy, table top or 19" RETMA-rack drawer mounting with front and rear access.

VFO in the TRIDENT T-25 eliminates the need for including complex analog circuitry in the controller.

HIGH VOLUME INTEGRAL AIR FLOW SYSTEM provides clean room quality and thermally stable air, giving added assurance of data reliability.

EXISTING TECHNOLOGY AND PACKAGING optimized in a manner that is more useful to the OEM designer.

FUNCTIONALLY ORGANIZED PRINTED CIRCUIT BOARDS facilitate maintenance and reduce MTTR.

STATE-OF-THE-ART ACCESS TIME OF 6 msec max. track-to-track and an average head positioning time of 30 msec provide optimum system throughput.

PROGRAMMABLE HEAD OFFSET AND VARIABLE STROBE TIMING features maximize recovery of marginal data and insure high data integrity.

ELECTROMAGNETIC ACTUATOR AND PRE-RECORDED SERVO SURFACE provide proven superior head positioning accuracy, track densities and reliability. The TRIDENT family offers the OEM designer a new dimension in improved data integrity for his system.

SECTOR LENGTH SELECTION in one-byte increments through jumpers on sector board.

FEATURES INCLUDE: address mark generator and detector for variable record lengths; NRZ data interface and an optional off-line exerciser.



LOW BOY



RACK MOUNT



TABLE TOP

T-25 SPECIFICATIONS AND CHARACTERISTICS

CAPACITY

27.4 million 8-bit bytes

TRANSFER RATE

806 Kilobytes per second

ACCESS TIME

Track to Track: 6 msec. max.
Average Positioning: 30 msec.
Full Stroke: 55 msec. max.
Average Latency: 8.3 msec.

ROTATIONAL SPEED

3600 rpm

PACK START/STOP TIME

Start Time: 20 seconds (nominal)
Dynamic Braking: 20 seconds (nominal)

DENSITIES

Track Density: 185 tracks per inch
Recording Density: 4040 bits per inch
13,440 bytes per track
67,200 bytes per cylinder

DISK PACK CHARACTERISTICS

Disk Pack: IBM 3336-type components
Recording Surfaces: 5 plus 1 servo surface
Tracks per surface: 408

OPERATING METHODS

Recording Method: Modified Frequency Modulation
Positioning Method: Linear Motor; Track-Following
Servo

ERROR RATE

Recoverable: 1 error in 10^{10} bits
Non-recoverable: 1 error in 10^{13} bits
Positioning: 1 error in 10^6 seeks

RELIABILITY

MTBF: Designed to exceed 2500 hours
MTTR: Designed to be less than 1.5 hours
Service Life: 5 years of 45,000 hours

CONTROLS & INDICATORS

Ready Indicator
Fault Indicator
Start/Stop Switch
Read Only Switch
Degate Switch

EXTERNAL DIMENSIONS

17.8" wide × 10.5" high × 32" deep
(452 mm × 267 mm × 813 mm)

POWER REQUIREMENTS

Input Voltage: 117, 190, 200, 208, 220, 230, 240 vac
(+10%, -15%)
Line Frequency: 60 Hz ±1% (50 Hz ±1%, optional)
Starting Current: 117 vac Models = 24 amperes.
Other Models = 13 amperes.
Operating Current: 117 vac Models = 7.5 amperes.
Other Models = 4.5 amperes.

OPERATING ENVIRONMENT

Temperature: 60°F (16°C) to 100°F (38°C)
Temperature Gradient: 20°F (11°C)
Humidity: 10% to 80% (no condensation)

HEAT DISSIPATION

2500 BTU/hour

AIR FLOW

350 CFM minimum at 60 Hz
290 CFM minimum at 50 Hz

OPTIONS

Off-line Exerciser
Dual Access



California Computer Products, Inc.
2411 W. La Palma, Anaheim, CA 92801
Tel (714) 821-2011 Twx 910-591-1154