

### TRIDENT T-300 DISK DRIVE

CalComp's Model T-300 Disk Drive offers OEM designers the advantages of field-proven IBM 3330-type technology and construction. With a capacity of 300 megabytes, this unit has been designed to be functionally compatible with the other drives in the TRIDENT family (T-25, T-50, T-80 and T-200).

## High Performance Contamination Control System

Air filters assure that clean air is circulated within a fully closed air system to cleanse and cool critical moving parts, which include the pack, heads and carriage & way assembly.

#### **Designed for Easy Maintenance**

All subassemblies are modular for ease of maintenance and are conveniently accessible for service without the necessity of major disassembly. Elec-

tronic components are functionally organized on pluggable printed circuit modules. An optional exerciser/monitor can be used to test drive operation off-line without unplugging system cabling. The exerciser can also monitor drive performance on-line to the CPU.

#### **Proven Design Features**

Disk packs can be obtained from any approved IBM 3336-11 pack supplier. Sector lengths are jumper selected in two byte increments. Rigid one-piece deck plate casting controls instability and mechanical resonance. The high performance phase-locked data separator is a standard feature which is an integral part of the disk drive. The TRIDENT family of disk drives features a commonality of interfaces, allowing a selection of capacities best suited for a given design. A single controller can drive any TRIDENT model without any modification.



T-300 TRIDENT DISK DRIVE

# T-300 DISK DRIVE SPECIFICATIONS AND CHARACTERISTICS

CAPACITY

312.1 megabytes

BYTES/TRACK

20160

BYTES/CYLINDER

383,040

CYLINDERS/PACK

815

**BIT DENSITY** 

6060 bpi

TRACK DENSITY

370 tpi

TRANSFER RATE

1209 kilobytes per second

**ROTATIONAL SPEED** 

3600 rpm

**AVERAGE LATENCY TIME** 

8.3 ms

**ACCESS TIME** 

Track to Track: 7.5 milliseconds

Average: 30 milliseconds

Maximum: 55 milliseconds

START/STOP TIME

Start: 25 seconds (nominal)

Stop: 25 seconds (nominal)

**RECORDING SURFACES** 

19 data and 1 servo surface

**OPERATING ENVIRONMENT** 

Temperature: 60° to 100°F (16° to 38°C)

Temperature Gradient: 20°F per hour (11°C per hour)

Humidity: 10% to 80% (no condensation)

**ERROR RATE** 

Recoverable: 1 error in 10<sup>10</sup> bits Non-recoverable: 1 error in 10<sup>13</sup> bits

Positioning: 1 error in 10<sup>6</sup> seeks

RELIABILITY

MTBF: Designed to exceed 2500 hours

MTTR: Designed to be less than 90 minutes

Service Life: 5 years or 45,000 hours

**CONTROLS & INDICATORS** 

Ready Indicator

Fault Indicator

Start/Stop Switch

Degate Switch

Read Only Switch

Interface Enable (Dual Access option only)

**DIMENSIONS** 

19.5" wide  $\times$  36" high  $\times$  33" deep

(495 mm wide  $\times$  914 mm high  $\times$  838 mm deep)

WEIGHT

480 pounds (218 kg)

POWER REQUIREMENTS

208/240 Vac + 10%, -15%

60 Hz  $\pm$  0.5 Hz, 50 Hz  $\pm$  1 Hz

5 amps-running, 25 amps-starting (10 seconds)

**HEAT DISSIPATION** 

3500 BTU/hour (832 kilocalories/hour)

**OTHER FEATURES** 

Variable Record Length

NRZ Data Interface

Off-Line Exerciser (Optional)

Dual Access (Optional)