

TRIDENT T-302 DISK DRIVE

CalComp's Model T-302 member of the TRIDENT family is essentially a T-300 Disk Drive using a differential type interface and address plug selection. The T-302 drive offers all of the TRIDENT's advanced and economical features for the OEM designer who prefers a differential interface over the standard TRIDENT DTL/TTL interface.

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

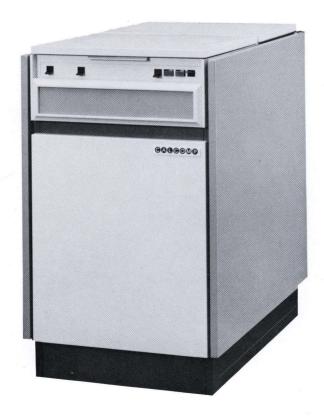
All subassemblies are modular for ease of maintenance and are conveniently accessible for service without the necessity of major disassembly. Elec-

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

These features include 3330 technology using track following servo design and standard 3336 media on a 12-high removable disk pack. Sector lengths are jumper selected in two type increments. Rigid one-piece deck plate casting controls instability and mechanical resonance. The high performance phase-lock data separator is a standard feature which is an integral part of the disk drive.

In addition to all of these significant design features, CalComp as the largest independent disk drive manufacturer provides a full range of support services.



T-302 TRIDENT DISK DRIVE

T-302 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: 6 milliseconds

Average: 30 milliseconds Maximum: 55 milliseconds

START/STOP TIME

Start: 20 seconds (nominal)

Stop: 20 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 10¹⁰ bits Non-recoverable: 1 error in 10¹³ bits

Positioning: 1 error in 10⁶ seeks

RELIABILITY

MTBF: Designed to exceed 4000 hours

MTTR: Designed to be less than 1 hour

Service Life: 5 years or 45,000 hours

CONTROLS & INDICATORS

Ready Indicator/Logical Address Plug

Fault Indicator

Start/Stop Switch

Degate Switch

Read Only Switch

Interface Enable (Dual Access option only)

DIMENSIONS

19.5" wide x 36" high x 33" deep

(495 mm wide x 914 mm high x 828 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)