CONTROL DATA®
9750/9751 DISK STORAGE UNITS

DESIGNED FOR ORIGINAL EQUIPMENT MANUFACTURERS

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_$21.3K_

OBS

CONTROL DATA 9750 and 9751 Disk-Storage Units are large-capacity, random-access storage devices. The basic disk-storage unit includes a spindle and associated drive motor, head-positioning mechanism, logic chassis, power supply, and cabinet enclosure.

The CDC® 9750/9751 models use the CDC 872 Disk Pack. This pack contains eleven recording disks and stores information on 19 oxide-coated surfaces. Head positioning is performed by a closed-loop, proportional servo system. The carriage is driven by a voice-coil linear actuator, which provides rapid data accessing.

These storage units are available in single-channel (9750) or dual-channel (9751) models. Both models have latency and seek-overlap features, which maximize throughput. The dual-channel 9751 unit allows read/write operations to occur on two units simultaneously (when two interface units are used), while seek operations are performed on other spindles.

SPECIFICATIONS

RECORDING FORMAT/CAPACITY

Capacity, full track mode: 113,000 bits/track (nominal)
2.1 x 10^6 bits/cylinder
870 x 10^6 bits/spindle (based on 404 tracks)
Recording Density: 4000 bpi (inner tracks)
Tracks Per Surface: 404 (plus 7 spares)

PROCESSING SPEED

Data-Transfer Rate: 850,000 bytes/second
Bit Rate: 6.8 MHz (nominal)
Spindle Speed: 3600 rpm

ACCESSING TIME

Full Stroke: 55 milliseconds
Average: 30 milliseconds
One Track: 7 milliseconds

DISK PACK

Type: CDC 872 or equivalent
Number of Disks: 11
Usable Surfaces: 20 (19 read/write and 1 servo)
Diameter: 14 inches
Coating: Magnetic oxide
Disk Thickness: 0.075 inch
Pack Weight: Approx. 20 lbs.

RECORDING HEADS PER SPINDLE

Type: Self loading, full track erase before write
Total Number: 20 (19 read/write and 1 servo head)
Read/Write Width: 0.004 inch, nominal
Read/Write to Erase Gap: 0.030 inch, nominal
Erase Width: 0.006 inch, nominal
Track Spacing: 0.0052 inch, nominal

OPERATOR CONTROLS

Switch/Indicators: Start (stop)
Logic Number (interchangeable plug)
Fault
Indicator Only: Unit Number
Maintenance

INTERFACE

Control Lines, Transmission Level/s, Nominal:
Logical "0" = +0.8 volts differential
Logical "1" = —0.8 volts differential
Control Lines, Receiver Thresholds, Nominal:
Logical "0" = +0.4 volts differential
Logical "1" = —0.4 volts differential
Transmission Line: Balanced twisted pair, terminated in 56 ohms. "Y" networks to ground.
Open Cable Protection: Provided
Data Transmission Lines, AC Transmitter:
- Sinks 30 milliamp current for logic "0"
- Sources 30 milliamp current for logic "1"
- Drives 75 ohm coaxial cable, terminated in 75 ohms to desired receiver-switching point.

POWER

Power Source: Two legs of 208 VAC, 3 phase, 60 Hz
Current/Phase: 8.0 amps (disks in motion)
4.0 amps (disks at rest)

PHYSICAL

Height: 38 inches   Depth: 48 inches
Width: 22 inches   Weight: 600 pounds

ENVIRONMENTAL

Operating Temperature: 60 to 90°F
Operating Humidity: 20 to 80 percent R.H. (noncondensing)
Nonoperating Temperature: minus 30 to plus 150°F
Nonoperating Humidity: 5 to 95 percent R.H. (noncondensing)
Heat Dissipation: 4600 BTU/hr.

Specifications are subject to change without notice.