

CONTROL DATA® 9754 DISK STORAGE UNIT

Design For Original Equipment Manufacturers



CONTROL DATA 9754 Disk Storage Units are 100-million byte, random-access peripheral storage devices which use the CDC® 879 Disk Pack or equivalent (IBM 3336). Each disk pack is removable and contains 10 oxide recording disks. Data can be written on 19 of 20 surfaces, and positioning information is permanently recorded on the remaining recording surface.

When using an IBM 3330 format, data written by the CDC 9754 may be read and updated by an IBM 3330 Drive. Conversely, data written by an IBM 3330 may be read and updated by the CDC 9754 Drive.

The basic disk storage unit (DSU) consists of a cabinet which contains a power supply, logic chassis, and a deck which mounts the drive spindle assembly and voice-coil positioning mechanism. Head positioning is performed by a closed-loop, proportional servo system, driving a voice-coil linear actuator.

The 9754 DSU is a single-channel unit which may be converted to dual-channel operation by simply adding Special Purchase Option (SPO) logic cards. Other features include Phase Lock Oscillator (PLO) data recovery, NRZ I/O data including write compensation in the drive, flexible sectoring which allows easy conversion (jumper plug) to any sector length requirements, and absolute addressing to calculate seek differences within the drive.

The 9754 is also available in several AC power configurations to satisfy international requirements. It is a single-phase device which derives its operating voltage through phase-to-phase or phase-to-neutral connections from a three-phase source.

FEATURES

- UL approved (60 Hz)
- CSA approved (60 Hz)
- Designed to meet VDE requirements (50 Hz)
- MTBF Goal 1900 hours
- Mounting is via self contained, single spindle unit with floor casters.
- "Star" cabling to each DSU
- Absolute addressing
- Integral air supply and filter system
- Sectoring—Multiple fixed-length sectoring (field selectable)
 - Variable-length sectoring
- Pre-wired dual channel (field converted to dual channel by adding cards)
- Phase Lock (PLO) read recovery
- NRZ-coded data I/O (write compensation in DSU)
- Maintenance—Maintenance status aids
 - Hinged logic chassis
 - Hinged top cover

SPECIFICATIONS

Capacity (8-bit byte): 100 MByte
Bits Per Inch (BPI): 4040
Tracks Per Inch (TPI): 192
Head Type: Single gap, no erase
Total Cylinders: 404 + 7 spares
Disks: 12 (CDC 879 or equivalent)
Data Surfaces: 19
Servo Surface: 1
Media Type: IBM 3336
Operating Speed: 3600 RPM
Transfer Rate: 6.451 MHz

Access Times—

Maximum: 55 MSec
ARAT: 30 MSec
Track-to-Track: 10 MSec

Physical Characteristics—

Height: 39.5 inches (100.3 cm)
Depth: 44.5 inches (113.0 cm)
Width: 22 inches (55.9 cm)
Weight: 500 pounds (317.5 kg)

Interface—

Control Lines ("A" Cable)
Star connected to each DSU
Line for operation on bus structure with common tag
Transmission by balanced twisted pair
Transmitters are Industry Standard 75110
Receivers are Industry Standard 75107

Data lines ("B" Cable)

Star connected to each DSU
Transmission by single-ended coax
Transmitters are discrete
Receivers are Industry Standard 75107

Operator Controls—

Start Switch/Indicator: Applies AC to drive motor
Fault Switch/Indicator: Indicates and clears fault status
Ready Indicator: Unit ready
Maintenance Indicator: Indicates off-line
Temperature Indicator: Indicates above normal temperature
Unit Number Indicator: Indicates unit selected
Logic Plug: Inserted to assign logical DSU number

Power—

Sequence: Included in "B" Cable
Requirements (Single Phase): 208 VAC, 60 Hz
220 VAC, 50 Hz
230 VAC, 50 Hz
240 VAC, 50 Hz

ACCESSORIES

- "A" and "B" Cables
- Logic Plug
- Data Pack
- CE Pack
- Head Alignment Card and Meter
- Off-line Minitester
- Physical Unit Lens