# Control Data® 9715-500 Fixed Storage Drive (FSD)

**Designed for Original Equipment Manufacturers (OEM)** 



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The Control Data 9715-500 Fixed Storage Drive (FSD) is a 230-millimeter (9-inch) rigid disk drive that provides 516 megabytes of unformatted storage in a sealed module. Drive characteristics include 20-millisecond average seek time, approximately 250 watts power consumption

and one-half rack size.

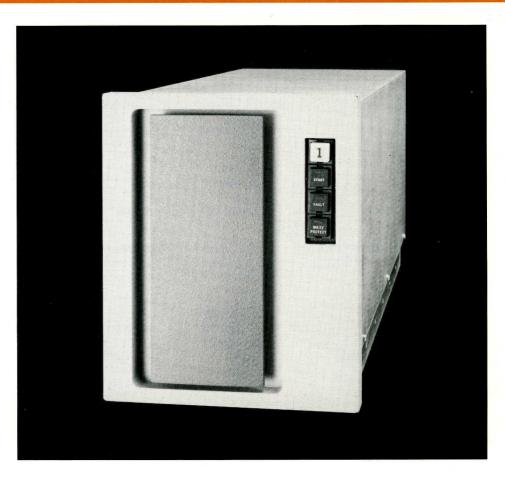
The 9715-500 operates with a 14.5 megahertz Storage Module Drive (SMD) interface or Intelligent Standard Interface (ISI). A direct coupled, DC brushless drive motor and a universal power supply permit worldwide use of the 9715-500. Physical dimensions of the drive allow side-byside mounting, providing over 1 billion bytes of storage in a standard 483-millimeter (19-inch) RETMA rack enclosure.

### **Features**

- 20-millisecond average seek
- Rack mountable
- Detachable, univeral power supply
- High MTBF
- Low maintenance cost
- 14.5 megahertz SMD or ISI interface
- Automatic carriage and spindle lock
- High performance linear actuator
- NRZ to RLL 2, 7 data conversion
- Fixed or variable sectoring (address mark)
- Daisy-chain interface capability
- Dual channel option
- UL, CSA, VDE standards
- FCC Class A compliance

#### Description

The 9715-500 FSD consists of seven disks in a sealed module, a direct coupled DC brushless motor with digital speed control, universal power supply, DC cooling fan, linear actuator



and thin film heads. The logic package uses low-power Schottky, l<sup>2</sup>L, ECL and LSI technology. All read/write, fault, transmitter/receiver, and microprocessor-controlled servo electronics are contained within the logic package.

#### **Applications**

- Business control systems
- Large terminal systems
- Scientific, medical and instrumentation systems
- Seismic systems
- Communications systems
- Database systems

## **Accessories**

- Rack-mounting slides
- Terminator
- Input/output cables
- DC cables
- Bar mounting kit
- Address select plug (4-7)
- Maintenance manual

## **Options**

- SMD I/O dual access feature
- Intelligent standard interface
- Power supply
- Front panel in color

# **Specifications**

Capacity (unformatted) 516 Mbytes Per Track 30,240 bytes

Per Cylinder 725,760 bytes Cylinders Per Drive 7

Number of Disks 12 **Data Surfaces** Servo Surfaces 1 24 **Data Heads** 

14.52 MHz Transfer Rate 3.600 r/min Spindle Speed

Recording Bit Density

Bits Per Inch 15,159 Tracks Per Inch 960 NRZ TO RLL 2, 7 data conversion Recording Method

14.6 Mbits/in<sup>2</sup>

Access Time Full Stroke

45 ms 20 ms Average 5 ms Track-to-Track Positioning Method Linear voice coil actuator

**Data Reliability** 

Recoverable Read Errors Less than 1 in 1010 bits transferred Unrecoverable Read Errors Less than 1 in 1012 bits transferred Less than 1 in 106 seek operations Seek Errors

**Drive Reliability** 

**MTBF** 15,000 hours,

11,250 hours, including power supply

Service Life 5 years Preventive Maintenance None Adjustments None

Power

AC 120, 220, 230 and 240 V, 50 or 60 Hz

±5 V logic, ± 24 V control addressing, DC

+ 40 V spindle motor

Approx. 250 W Power Dissipation

Environmental

10°C to 45°C (50°F to 114°F) **Operating Temperature** Non-Operating Temperature  $-40^{\circ}$ C to  $60^{\circ}$ C ( $-40^{\circ}$ F to  $140^{\circ}$ F) 20% to 80%

**Operating Humidity** 

**Physical Characteristics** Height 259 mm (10.2 in) Width 216 mm (8.5 in)

762 mm (30 in) with power supply Depth 610 mm (24 in) without power supply

31 kg (70 lb), drive Weight

37 kg (82 lb), including power supply

Specifications subject to change without notice.

Control Data sales offices are located in principal cities throughout the world.

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