

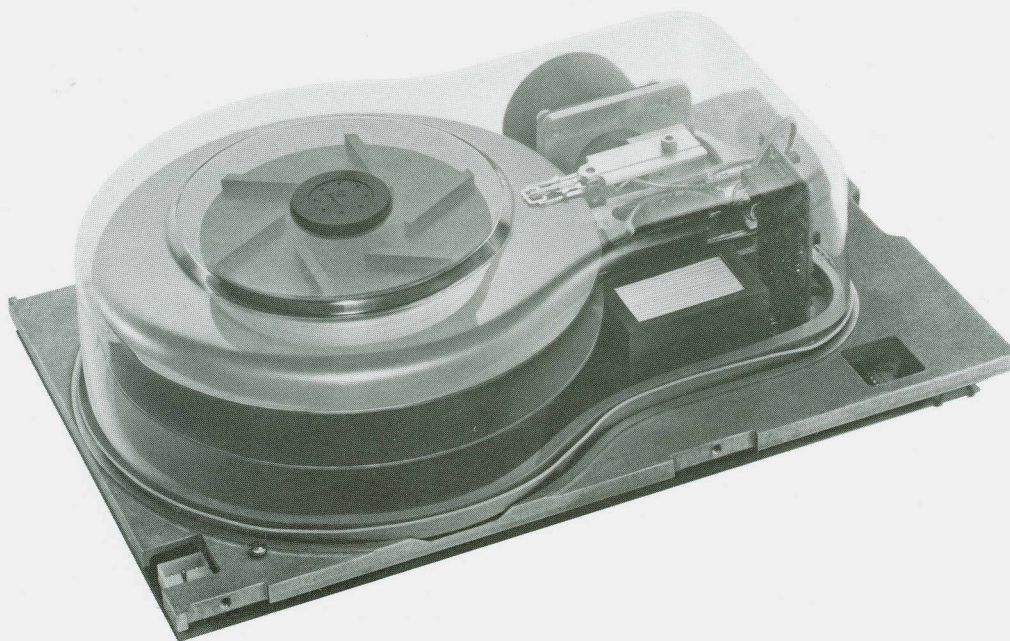
## 101 OEM Disc Storage Drive Product Information

The Memorex 101 is an eight-inch, rigid disc, *data storage module* that fits into a flexible disc drive envelope providing 11.7 MB of storage capacity. Features and benefits include:

- Integral data separator
- High-speed band actuator
- Imbedded drive spindle motor
- Sealed media environment
- Low heat dissipation
- Low power requirements
- Light weight

By combining Winchester-type technology with proven design techniques, the original equipment manufacturer is ensured of the ultimate in reliability and quality from Memorex. Because Memorex is an independent manufacturer of the complete 8-inch drive, the OEM customer is assured that complete technological control of manufacturing occurs in all drive components—head disc assembly, electronics, and media.

The OEM customer is further supported by the finest field organization in the industry.



**101 OEM Disc Storage Drive**  
**Product Information**

**MEMOREX**

THE COMPUTER HISTORY MUSEUM



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**101 Disc Storage Drive  
Advantages****Sealed Environment**

A carefully designed sealed environment protects the head, media, actuator, and spindle from contamination and utilizes an absolute filtration system inside the enclosure.

**Disc Coating Characteristics**

Oxide particles in the coating are circumferentially aligned to provide high signal output and high resolution. Memorex 100X coating surface shield extends the useful disc life over 100 times the life of discs not coated.

**Easy Serviceability**

By integrating the drive motor with the hub, we have eliminated belts and lowered parts count which increases reliability and saves valuable space. The electronics package mounts to the bottom of the head/disc assembly (HDA) for easy field service access even while the drive is running.

**Data Separator**

The 101 disc drive receives write data in NRZ code and also transmits read data in NRZ code. NRZ data is MFM encoded and decoded to and from the media by a phase locked data separator in the drive.

**Low Power Consumption**

Less than 100 watts of power are required to operate the Memorex 101 which lowers system costs. What's more, only DC power is necessary allowing for international versatility.

**101 OEM Disc Storage Drive  
Product Specifications****Capacity** (unformatted)

Drive: 11.7 MB

Per Surface: 2.9 MB

Per Track: 12,000 Bytes

**Data Retrieval Times**

Track-to-Track Access Time: 19 MS

Average Access Time: 70 MS

Maximum Access Time: 120 MS

Average Latency: 10.1 MS

Transfer Rate: 592.8 K bytes/sec.

**Densities**

Recording: 6100 bits per inch

Track: 195 tracks per inch

**Dimensions**

Width: 8.55 inches

Height: 4.38 inches

Depth: 14.0 inches

Weight: 10 lbs.

**Power Requirements**

Voltage: +24 VDC  $\pm$  10% @ 3.5 A

+ 5 VDC  $\pm$  5% @ 2.5 A

- 5 VDC  $\pm$  5% @ 250 MA

**Environment**

Ambient Temperature: 50° to 110°F

Relative Humidity: 10% to 90%

**Specifications**

Rotational Speed: 2964 RPM

Cylinders: 244

Heads: 4

Physical Sectors

Encoding Method MFM

Index: 1

Sectors: Selectable up to maximum of 4096 bytes/sector

Interface: Low cost, small system compatible

**Reliability Specifications**

Fixed Disc

MTBF: 8000 hrs.

MTTR: 30 min.

Error Rate

Soft Read Error: 1 per 10<sup>10</sup>

Hard Read Error: 1 per 10<sup>12</sup>

Seek Error: 1 per 10<sup>6</sup>

**Memorex Corporation**

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