

# 50.5 MBytes 5 1/4" Half-Height Disk Drive

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## 3650

- Based on MiniScribe's 3000 family of 5 1/4-inch half-height disk drives.
- Field-proven rack and pinion actuator provides positioning accuracy throughout temperature extremes
- 50.5 MByte (unformatted)
- 61 msec. average access time
- Tri-colored LED
- 25,000 hours MTBF
- Product family growth to higher capacities
- Industry standard ST412 interface

Responding to the demand for a higher capacity, cost-effective, 5 1/4-inch half-height disk drive with increased performance, MiniScribe has met the challenge with its new model 3650. Based on MiniScribe's rugged 3000 family of 5 1/4-inch half-height Winchester disk drives, the 3650 is an innovative three disk, six head, 50.5 MByte configuration with an average access time of 61 milliseconds.

The 3650 features a tri-colored LED which allows the operator to view various operational phases of the disk drive by displaying a green light during normal operation, a blinking red light for error codes and an amber light while the heads are parked at the landing zone.

Like other MiniScribe products, the 3650 incorporates the company's high standards of quality and innovation. The 3650 utilizes MiniScribe's field-proven rack and pinion linear actuator system which provides positioning accuracy throughout temperature

extremes as well as rugged resistance to shock and vibration. In addition, the drive incorporates the industry standard ST412/506 interface.

With planned enhancements to higher storage capacities, the 3650 demonstrates MiniScribe's technical leadership by delivering one of the most favorable cost per megabyte solutions for your current and future storage requirements.

In addition to the 3650, MiniScribe produces a complete line of 3 1/2-inch and 5 1/4-inch Winchester disk drives which begins at 12.75 MBytes, extends to high capacity, high performance models, and includes a variety of standard, intelligent and custom interfaces.



 **MiniScribe**  
Solutions for Data Storage

# 3650 Specifications

## Capacity Unformatted

Per Drive (MBytes)	50.5
Per Track (Bytes)	10,416

## Capacity Formatted

Per Drive (MBytes)	42.25
Per Track (Bytes)	8,704
Per Sector (Bytes)	512
Sectors per Track	17

## Functional

Disks	3
R/W Heads	6
Cylinders	809
Total Data Tracks	4,854
Track Density (tpi)	763
Recording Density (bpi)	10,124
Areal Density (Mbits/sq.in.)	7.72
Rotational Speed (RPM)	3,600

## Data Transfer Rate

(Mbits per Second)	5.0
Recording Method	MFM

## Access Time (incl. settling)

Average (msec.)	61
Track-to-track (msec.)	15
Maximum (msec.)	132
Latency (average, msec.)	8.33

## Interface

ST412

## Reliability

MTBF	25,000 hours.
PM	None
MTTR	30 minutes
Component Design Life	5 years

## Error Rates

Soft Read Errors	1 in $10^{10}$ bits transferred
Hard Read Errors	1 in $10^{12}$ bits transferred
Seek Errors	1 per $10^6$ seeks

## DC Power Requirements

+5V DC +/-5%	0.5 amps typical
+12V DC +/-5%	1.3 amps typical
Max. Starting (22 sec.)	3.5 amps

## Power Dissipation

18.1 watts

## Environmental Limits

Ambient Temp.	40°F - 122°F (4°C to 50°C)
Relative Humidity	8% - 80%
Maximum Wet Bulb	78°F (26°C)

## Physical

Height	1.625 in. (41.3 mm)
Width	5.75 in. (146 mm)
Depth	8.00 in. (203 mm)
Weight	3.1 lbs. (1.4 kg.)

Features and specifications subject to change without notice.

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