TEAC®

SD-240/SD-260

OCT 2 4 1991

2.5 Inch Hard Disk Drive

- Super compact 43MB & 62MB data storage
- 2.5″ drives with a height of merely 0.6″ (including embedded interface)
- An auto shipping lock function protects your important data
- Fast 19msec access time
- 32K internal data buffer with Read Look Ahead function
- Excellent, high-speed data transfer

Swift & efficient 0.6″ high, 2.5″ form factor hard disk drives with incredible 43MB & 62MB data storage

Suiting increasing demands for large-capacity storage in compact-sized drives, TEAC presents the revolutionary new SD-240 and SD-260 2.5″ hard disk drives with built-in interfaces, at a mere height of 0.6″. Providing formatted data storage up to a remarkable 43MB and 62MB respectively,

high-speed buffer-to-disk data transfer of 13.33Mbits/sec (SD-240) and 16Mbits/sec (SD-260), a built-in auto shipping lock function, and low power requirements, these disk drives promise to serve your needs well into tomorrow.

Compact 43MB & 62MB storage is now a reality

The SD-240 and SD-260 drives have extraordinary data storage capacities of 43.0MB and 62.7MB (formatted) respectively, amply meeting current demands for personal computer and laptop external storage devices with ever-larger storage capacities.

Slim, lightweight 2.5″ drives at a height of only 0.6″, perfect for notebook-size PCs

The 2.5″ SD-240/SD-260 offer all the benefits of a slim design at a height of only 0.6″, including an embedded interface. This achieves further size reductions for personal computers, laptops, and notebook-size PCs.

Offering a variety of installation options for further flexibility

The placement of screw holes for drive installation often differs from manufacturer to manufacturer. However, the SD-240 and SD-260 can be configured for virtually any installation screw configuration by simply changing the disk's metal chassis plate.

Auto shipping lock function

The auto shipping lock is designed to protect the media against the risks of damage due to vibration and shock during transport. When the power is turned off, the head carriage is locked automatically at the shipping zone, within the inside limit of the work zone, to protect your important stored data.

Fast 19msec access time

Average access time is a mere 19msec.

High-speed data transfer

Data transfer is achieved at a rapid 13.33Mbits/sec (SD-240) and 16Mbits/sec (SD-260) (buffer-to-disk transfer).

Internal data buffer

Using RLA (Read Look Ahead), this built-in data buffer enables very high-efficiency data transfer between disk and host computer with a buffer size of 32K.

Embedded PC/AT interface

Smooth and simple system integration of the SD-240/SD-260 is ensured by a PC/AT interface, one of the most popular hard disk interfaces used today.

High-performance drive mechanism

An extremely durable, maintenance-free motor with performance capabilities of over MTBF 100,000POH.

Remarkably improved CSS durability

Thanks to highly reliable CSS (Contact Start/Stop) characteristics, the SD-240/SD-260 can achieve durability standards in excess of 30,000 start/stop operations.

Universal installation orientation

The head assembly uses a rotary actuator that provides circular arc head motion about the support point. This keeps the drive well-balanced and allows it to be installed in virtually any physical orientation.

Automatic self-diagnosis

When the power is switched on, the SD-240/SD-260 automatically performs a self-check sequence, checking program ROM, buffer RAM, and the register in the interface controller.

Automatic replacement processing for error correction

Error sectors are automatically replaced during formatting.

SPECIFICATIONS

Recording Capacity (formatted):
- Per drive: SD-240: 23.0Mbytes; SD-260: 62.7Mbytes
- Per track: SD-240: 21.5Kbytes; SD-260: 25.6Kbytes
- Per sector: 512 bytes (fixed)

Data Sectors:
- Per drive: SD-240: 84,000; SD-260: 122,600
- Per track: SD-240: 42; SD-260: 50

Interface: PC/AT
Number of Disks: 1
Number of Surfaces: 2
Number of Heads: 2
Number of Cylinders: SD-240: 1,000; SD-260: 1,226
Number of Tracks: SD-240: 2,000; SD-260: 2,452
Track Density: SD-240: 2,121tpi; SD-260: 2,500tpi
Recording Density: SD-240: 51,788bpi; SD-260: 61,600bpi
Magnetic Flux Transition Density: SD-240: 38,840frpi; SD-260: 46,200frpi

Recording Method: 1-7 RLL code
Access Time (including settling time):
- Track to Track: 8msec
- Average: 19msec
- Maximum: 40msec

Disk Rotation Speed: 3,600rpm ± 0.5%
Average Rotational Latency: 8.33msec
Data Transfer Rate:
- Buffer-to-disk: SD-240: 13.33Mbits/sec; SD-260: 16Mbits/sec
- Buffer-to-initiator: 4.0Mbytes/sec max

Data Buffer: 32,768 bytes
MTBF: 100,000POH or more (subject to typical usage)
Error Rate: 1 or less per 10^{13} bits (irretrievable read error)
Safety Standards: UL, CSA TÜV
CSS: 30,000 start/stop operations or more
Ambient Temperature:
- Operating: 5—50°C (41—122°F)
- Non-Operating: -40—60°C (-40—140°F)

Temperature Gradient:
- Operating: 20°C/hour or less (non-condensing)
- Non-Operating: 30°C/hour or less (non-condensing)

Relative Humidity:
- Operating: 8—80% (non-condensing) [maximum wet-bulb temperature: 29°C (84.2°F)]
- Non-Operating: 8—80% (non-condensing) [maximum wet-bulb temperature:29°C (84.2°F)]

Shock:
- Operating: 5G or less (half-sine pulse, 11msec duration)
- Non-Operating: 100G or less (half-sine pulse, 11msec duration)

Vibration:
- Operating: 0.5G or less (5—500Hz, sweep time 1 oct/min)
- Non-Operating: 5G or less (5—500Hz, sweep time 1 oct/min)

Power Requirements:
5V DC +5% [Permissible ripple: 100mVp-p (including spike noise)]

Power Consumption:
- Average value at seek (typical): SD-240: 1.6W; SD-260: 1.7W
- Average value at read/write (typical): SD-240: 1.6W; SD-260: 1.7W
- At idle (typical): SD-240: 1.4W; SD-260: 1.5W
- At standby (typical): SD-240: 0.2W; SD-260: 0.3W
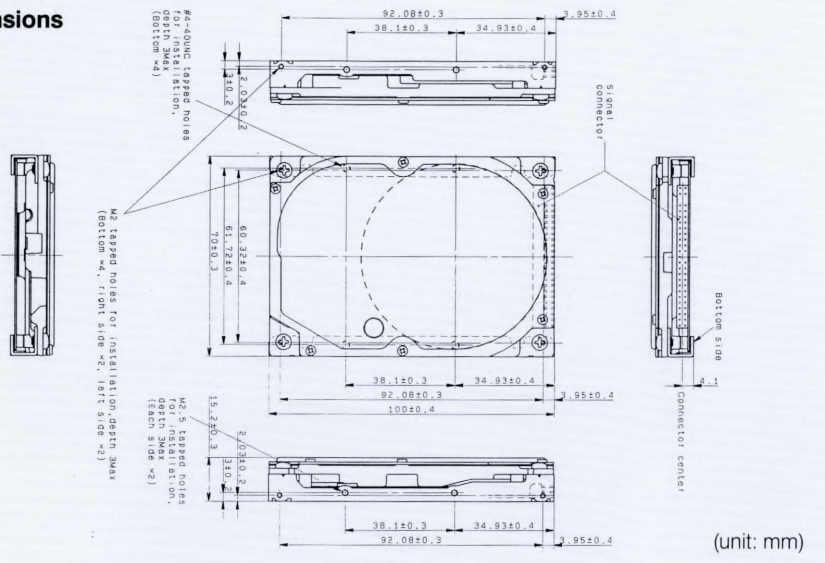- At sleep (typical): SD-240: 0.1W; SD-260: 0.2W

Dimensions (W × H × D): 70.0 × 15.2 × 100.0mm
Weight: 170g (typical)

Dimensions

(unit: mm)

Features and specifications are subject to change without notice.
*PC/AT is a registered trademark of the International Business Machine Corporation.