

Establishing a new benchmark for mobile hard disk drive performance, quality, and flexibility



IBM Travelstar 6GT

Highlights

Leading mobile drive technology

IBM, the company that first introduced Giant Magnetoresistive (GMR) head technology, continues its industry technology leadership by offering the first implementation of GMR in a mobile hard disk drive.

Excellent performance

The Travelstar™ 6GT provides fast data rates, high RPM (4200), and a large 512 KB data buffer to enhance performance without increasing power consumption. Ultra DMA boosts the interface transfer rate to 33.3 MB/sec.

High capacities for convenient data access and storage

An industry-leading areal density of 4.1 Gbits/sq. inch means that the Travelstar 6GT drive offers the high capacity (6.4 and 5.4 GB) required by mobile users to store and access large applications and high volumes of data, all from one drive.

Rugged design

The Travelstar 6GT delivers proven Travelstar ruggedness at 600 G/2 ms non-operating shock rating and an operating shock rating of 125 G/2 ms.

Superior power management

IBM's Enhanced Adaptive Battery Life Extender 2.0 power management technology includes Performance, Active, and Low Power Idle modes. The drive selects the appropriate mode to help minimize power usage and increase battery life.

Continuing IBM's technology leadership in mobile disk drives

The Travelstar 6GT exemplifies IBM's leadership in the mobile hard disk drive market. For example, the Travelstar 6GT employs new IBM Giant Magnetoresistive (GMR) head technology. GMR increases areal density, thereby reducing the number of disks and heads required to provide each capacity point. This results in greater storage capacity within the volume of specifications occupied by the drive.

The Travelstar 6GT has industry-leading specifications in the following areas:

- Highest areal density at 4.1 Gbits/sq. inch
- Highest capacity in class (6.4 GB)
- Best ruggedness (non-operating shock) in class at 600 G/2 ms
- Best power management in the mobile hard disk drive market

Exceptional mobile data storage value

The Travelstar 6GT provides the exceptional flexibility, capacity, performance, power management, shock resistance, and reliability required by today's notebook computer users. This translates into high value for notebook computer users because they often want to store large volumes of data directly on their hard disk drives rather than carry CDs or tape cartridges. The Travelstar 6GT provides notebook users with near-desktop capacity and functionality, enhancing both their mobile computing efficiency and convenience.



Travelstar 6GT 2.5-inch 6.4 GB 12.5mm disk drive

IBM Travelstar 6GT at a glance

DADA-25400/DADA-26480

Configuration

Interface	ATA-4
Capacity (GB)	5.40/6.48
Sector size	512
Recording zones	8
User cylinders	9280
Data heads	5/6
Disks	3
Areal density (max Gbits/sq.inch)	4.1
Recording density (max KBPI)	256.4
Track density (TPI)	16,000

Performance

Data buffer (KB)	512
Rotational speed (RPM)	4200
Latency (average ms)	7.1
Media transfer rate (Mbits/sec)	61.5-102.6
Interface transfer rate (max AT)	33.3 Ultra DMA mode-2, 16.6 PIO mode-4
Seek time (typical read)	
Average (ms)	12
Track-to-track (ms)	4
Full-track (ms)	23

Reliability

Warranty (years)	3
Error rate (non-recoverable)	<1 per 1.0 E 13 bits transferred
Load/unload cycles	300,000

Power

Power requirement	+5VDC (+/-5%)
Dissipation (typical watts)	
Start-up (max peak watts)	4.7
Seek (average watts)	2.3
Read (average watts)	2.1
Write (average watts)	2.2
Performance idle (average watts)	1.85
Active idle (average watts)	0.95
Low power idle (average watts)	0.65
Standby (average watts)	0.3
Sleep (watts)	0.1
Power consumption efficiency index (watts/MB)	0.0001

Environmental characteristics

Ambient temperature	5 to 55° C / -40 to 65° C
Relative humidity	8% to 90%/5% to 95%
Maximum wet bulb	29.4° C / 40° C
Shock (half sine wave)	125G/2 ms / 600G/2 ms
Vibration (random[RMS]) (swept sine)	0.67G (5-500 Hz) / 3.01G (5-500 Hz) 1G 0-P (5-500 Hz) / NA

Physical size

Height	12.5 mm / 0.49 in
Width	70 mm / 2.75 in
Depth	100 mm / 3.93 in
Weight (max grams)	140 g / 4.94 oz

IBM quality and service

The Travelstar 6GT is backed by a three year warranty and a wide range of technical support and services, which may include qualification support and

integration assistance. This comprehensive support package helps ensure that you can continue to develop and manufacture high-quality, cost-effective systems.

Tell me more

General product information for other IBM hard disk drive products is available by calling 1 800 IBM-7777 and asking for Dept. Star 30 (outside of North America, call 1 416 383-5161 or fax 1 905 316-4733). Information is also available via the Internet at **www.ibm.com/storage/harddisk**. You can also contact IBM's TECHFAX system by dialing 1 408 256-5418 from a touch-tone phone. Follow the voice prompts to receive a TECHFAX directory. (International callers must call from a phone connected to a fax machine.)



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