

Innovation, higher capacity, and improved performance

HITACHI
Inspire the Next

Hitachi Family of Microdrives

Highlights

- ▶ ***Provides high-capacity, high-performance removable storage ranging from 340 MB to 1 GB in a one-inch hard disk drive***
- ▶ ***Integrates with a variety of hand-held devices through use of the industry-standard CF+** Type II format and compatibility with PCMCIA Type II (with an adapter)***
- ▶ ***Provides reliable storage for digital cameras, handheld PCs, digital audio players, laptops, and other portable handheld devices***
- ▶ ***Incorporates leading-edge technologies such as giant magnetoresistive (GMR) head technology, load/unload features, Enhanced Adaptive Battery Life Extender* 3.0, and TrueTrack* servo for maximum capacity, performance, and reliability***



New applications for high-capacity, compact storage

The Hitachi Microdrive provides breakthrough storage capacity for portable electronic devices in an industry-standard CF+ Type II form factor. This capacity enables users of digital cameras to capture more high-resolution photos without having to frequently download data. In addition, handheld PC users can access more applications and maintain large databases, while notebook users can back up and transport their data more quickly and conveniently.

Increased capacity, portability, and value

With capacities ranging from 340 MB to 1 GB on a single hard disk drive, the Hitachi family of Microdrives provides high-capacity, cost-effective personal storage. Weighing only 16 grams, the Hitachi Microdrive provides outstanding capacity in a compact, portable package—a key requirement for today's handheld devices.

Higher performance, increased productivity

With a maximum sustained data rate exceeding 4 MB/sec, the Hitachi Microdrive provides a significant performance improvement over current flash memory. As a result, large files can be transferred very quickly, and users can be much more productive.

Hitachi family of Microdrives

- *Hitachi 1 GB Microdrive, Hitachi 512 MB Microdrive, and Hitachi 340 MB Microdrive*
- *A Travel Kit for the Hitachi 1 GB, 512 MB, and 340 MB Microdrive, including Microdrive, PC Card adapter, and field case*

Hitachi Family of Microdrives specifications

Product name 1 GB Microdrive / 512 MB Microdrive / 340 MB Microdrive

Model names DSCM-11000/DSCM-10512/DSCM-10340

Configuration

Interface	CF+ (ATA and PCMCIA compatible)
Capacity (GB)	1000/512/340
Sector size (bytes)	512
Disks	1
Areal density (max Gbits/sq. inch)	15.2
Recording density (max KBPI)	435.0
Track density (TPI)	35,000

Performance

Data buffer	128 ¹
Rotational speed (rpm)	3600
Latency average (ms)	8.33
Media transfer rate (max. Mbits/sec)	37.8 to 58.6
Interface transfer rate (max. MB/sec)	13.3
Sustained data rate (MB/sec)	2.6 (min); 4.3 (max)

Seek time (read, typical) ²	
Average (ms)	12
Track to track (ms)	2
Full track (ms)	20

Reliability

Error rate (non-recoverable)	< 1 per 1.0 E 13 bits transferred
Start/stops (at 40° C)	300K

Power

	+3.3V power supply	or	+5V power supply
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Requirement	+3.3VDC, ±5%	or	+5VDC, ±5%
Current (write)	250 mA		260mA
Current (standby)	20 mA		20 mA
Power consumption efficiency (watts/MB)	0.000495/0.000967		0.00085/0.00166

Dimensions

Height (mm)	5 +0 / -0.10
Width (mm)	42.80/±0.10
Depth (mm)	36.40/±0.15
Weight (max. kg)	16 (max)

Environmental characteristics

Operating	
Ambient temperature	0° to 55° C
Relative humidity (non-condensing)	8% to 90%
Max. wet bulb (non-condensing)	29.4° C
Shock (half sine wave)	175 G (2 ms)
Random Vibration (RMS)	0.67 G (5 to 500 Hz)
Vibration (swept sine)	1 G 0-peak (5 to 500 Hz)

Non-operating	
Ambient temperature	-40° to 65° C
Relative humidity (non-condensing)	5% to 95%
Max. wet bulb (non-condensing)	400° C
Shock (half sine wave)	1500 G (1 ms)
Random Vibration (RMS)	3.01 G (5 to 500 Hz)
Vibration (swept sine)	NA

¹ 68 KB used for microcode

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Hitachi Global Storage Technologies

For more information

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