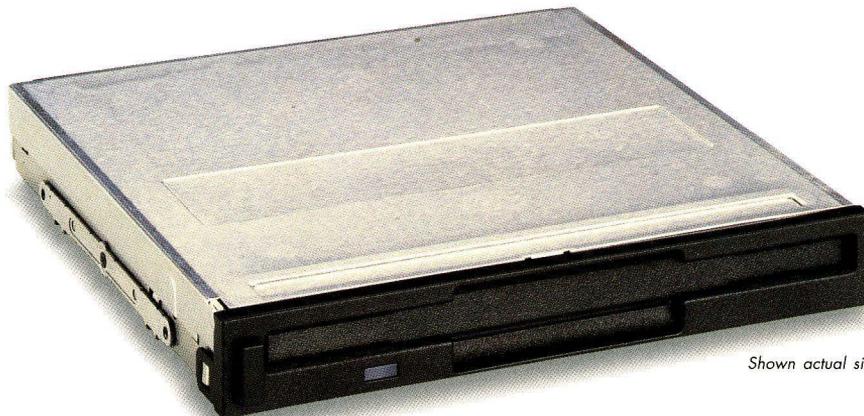


NEC FD1139H 3½-Inch Low-Profile Floppy Disk Drive

Power efficiency and high reliability in the lightest drive available.

FEB 24 1994

- Provides 1.44-MB formatted storage
- Weighs just 5.5 oz
- Measures only .6" high; 4" wide and 4" long
- Reads and writes to 720-KB disks
- Consumes only .015 watts in the stand-by mode
- 30,000 POH MTBF



Shown actual size.

The FD1139H is NEC's latest answer to industry needs for smaller, lighter, more reliable, and power-efficient storage devices.

The 3½-inch floppy disk drive features 2 MB of unformatted storage as well as read/write compatibility with 1-MB drives. Only .6-inches high, the 5.5-oz drive weighs 62% less than standard 1-inch high microfloppy drives.

The FD1139H is slightly larger than a 3½-inch diskette. Using NEC's proprietary

linear stepper motor, it realizes a 4 x 4-inch width and length. The stepper motor design also features very low power consumption, increased positioning precision, and no rotating parts.

This reduction in mechanical parts contributes to the FD1139H's increased reliability (30,000 POH MTBF) and shock resistance. The shock specifications are 5G operating and 80G non-operating.

Along with size reduction and increased reliability, the FD1139H consumes only

1.3 watts (W) in read/write mode and just .015 W in stand-by mode. For battery-powered systems, this is ideal.

The extremely compact and power-efficient FD1139H is the obvious choice for the next generation of notebook computers.

NEC

FD1139H Disk Specifications

	720-KB Mode	1.44-MB Mode
Unformatted Capacity	1 MB	2 MB
Formatted Capacity	720 KB	1.44 MB
Data Transfer Rate (Kb/sec)	250	500
Rotational Speed (rpm)	300	300
Recording Density		
Bit density (bpi)	8,717	17,434
Track density (tpi)	135	135
Number of tracks	160	160
Seek Time		
Track-to-track	3 ms	3 ms
Settling Time	15 ms	15 ms
DC Power Requirement	+5V	+5V
Power Dissipation (watts)		
Read/Write mode	1.3 W	1.3 W
Stand-by mode	.015 W	.015 W
Environmental		
Operating temperature	39° to 115°F (4° to 46°C)	39° to 115°F (4° to 46°C)
Non-operating temperature	-4° to 140°F (-20° to 60°C)	-4° to 140°F (-20° to 60°C)
Relative operating humidity	20% to 80%	20% to 80%
Non-operating humidity	10% to 90%	10% to 90%
Shock		
Operational	5G	5G
Non-operational	80G	80G
Vibration		
Operational	0.5G, 5 to 500 Hz	0.5G, 5 to 500 Hz
Non-operational	2.0G, 5 to 500 Hz	2.0G, 5 to 500 Hz
Dimensions		
Height	.6 in. (15 mm)	.6 in. (15 mm)
Width	4.0 in. (101.6 mm)	4.0 in. (101.6 mm)
Depth	4.0 in. (101.6 mm)	4.0 in. (101.6 mm)
Weight	5.5 oz (156 g)	5.5 oz (156 g)
Reliability		
MTBF	30,000 POH	30,000 POH
MTTR	< 30 minutes	< 30 minutes
Device life	15,000 POH or 5 years	15,000 POH or 5 years