

OEM MINIDISK DRIVE

APR 19 1985

M2361A

APR 29 1985

*10.5-inch (268mm) Winchester-type fixed disk drive
with 689-megabyte capacity
and 18-millisecond average positioning time.*



M2361A



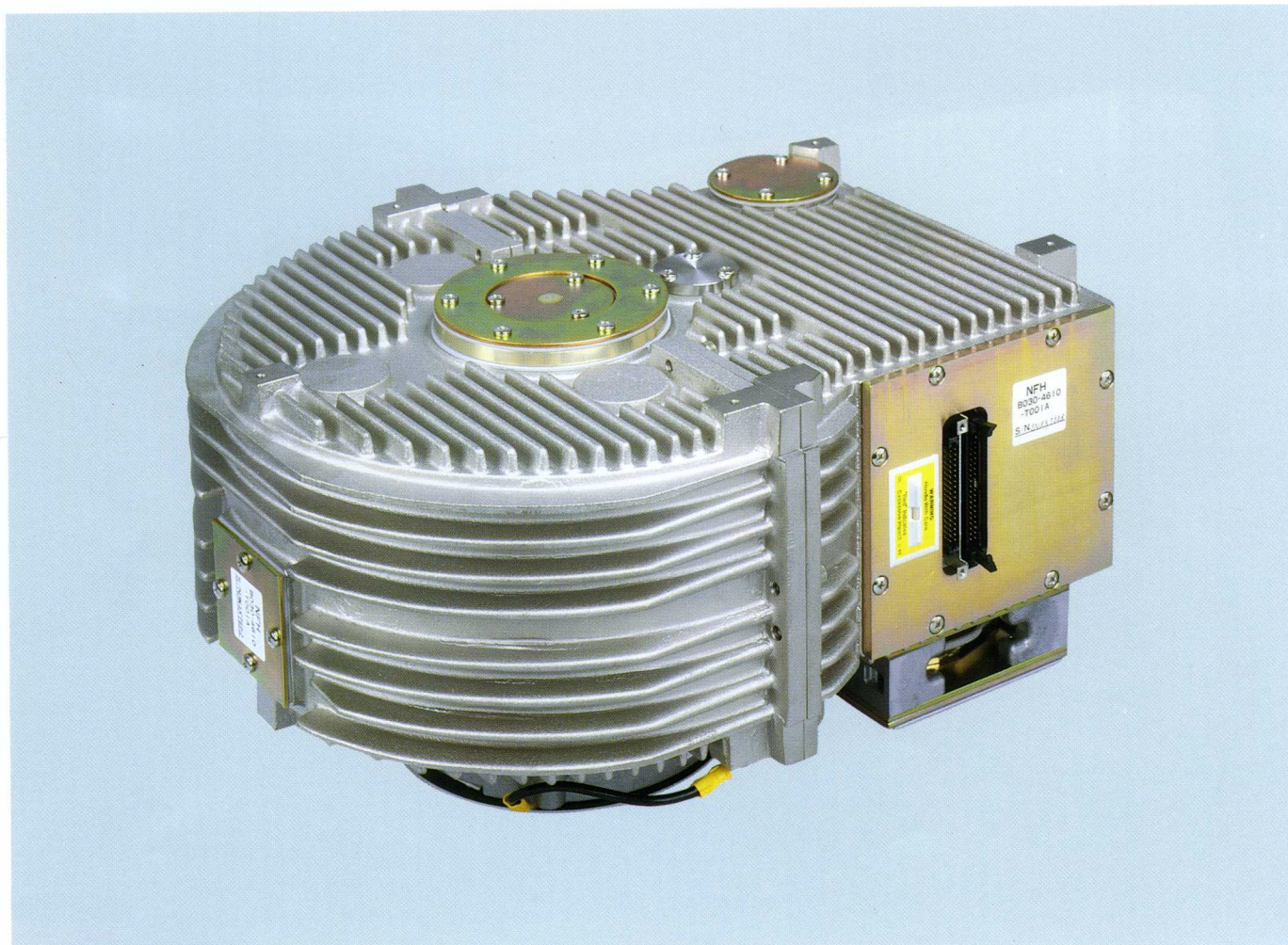
The M2361A Minidisk Drive is a 10.5-inch (268mm) Winchester-type fixed disk drive offering a very large storage capacity, superior performance, and superb reliability. These features make the M2361A suitable for both online and large-scale data base applications. The M2361A consists mainly of a disk enclosure, four printed circuit boards, and a DC power supply unit. The disk enclosure is completely sealed, and integrates six disks, 21 Winchester-type contact start/stop heads, a rotary actuator, a DC spindle motor, and IC read preamplifiers.

A very large capacity, high performance

The M2361A Minidisk Drive provides 689 megabytes on six disks. The average positioning time is 18 milliseconds, and the data transfer rate is 2.458 megabytes per second.

Enhanced reliability

The completely sealed disk enclosure incorporates a breathing filter and an absolute recirculation filter to provide a contamination-free environment. Winchester-type contact start/stop heads eliminate moving parts for head loading and unloading. The head IC amplifies small read signals to increase the reliability of read data. Printed circuit boards incorporate advanced LSI semiconductors. With these features, the M2361A assures a mean-time-between-failures (MTBF) of 20,000 power-on hours.



M2361A disk enclosure

Compact design

The M2361A can be mounted in a standard 19-inch rack, saving installation space. A stand-alone model is also available.

Dual channel option

The M2361A can be accessed by two controllers when a dual channel option is provided.

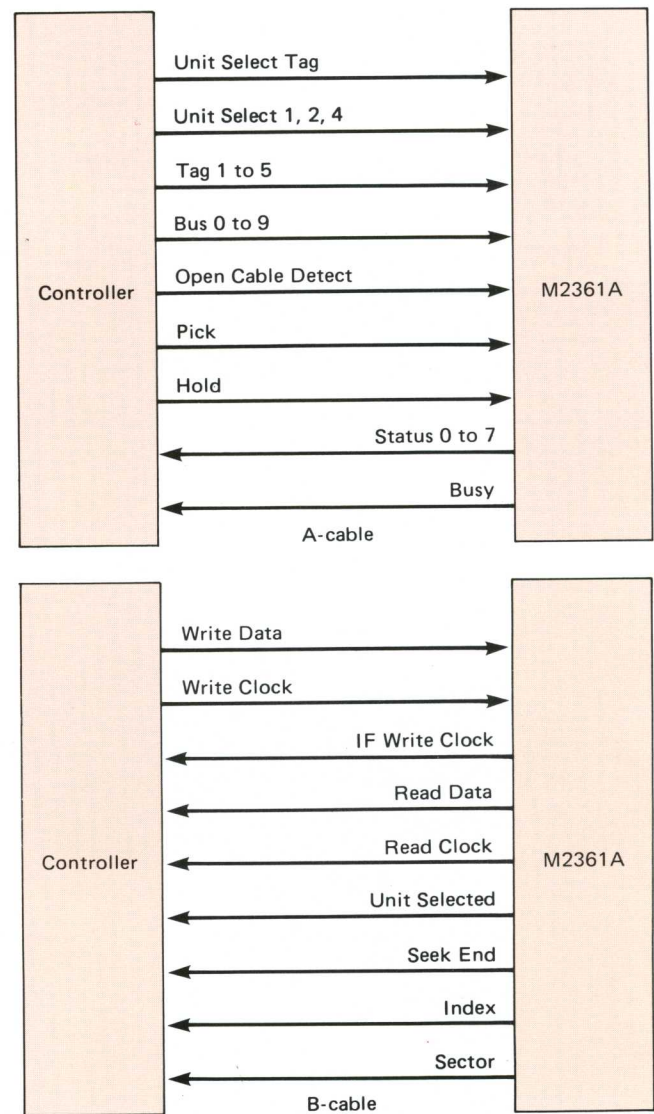
Modified SMD interface

The industry standard SMD interface has been modified to support the M2361A's increased track capacity and to facilitate maintenance.

Maintenance-free

With the completely sealed disk enclosure, built-in DC spindle motor, and highly reliable printed circuit boards, maintenance of the M2361A is reduced to the bare minimum. Even if errors occur, the error information is provided both via light-emitting diodes on a printed circuit board and via interface signals, for improved serviceability. The compact disk enclosure can be easily replaced by a customer engineer, and mean-time-to-repair (MTTR) is less than 30 minutes. No preventive maintenance is required.

Modified SMD interface



FUNCTIONAL SPECIFICATIONS

		M2361A
Storage capacity (unformatted)		689.8 megabytes
Disks (10.5-inch)		6
Heads	Read/write	20 (2 per surface)
	Servo	1
Track capacity (unformatted)		40,960 bytes
Tracks per cylinder		20
Cylinders		842
Positioning time	Track-to-track	5.5 milliseconds
	Average	18 milliseconds
	Maximum	35 milliseconds
Average latency		8.33 milliseconds
Rotational speed		3,600 rotations/minute
Recording density		18,620 bits/inch
Track density		880 tracks/inch
Data transfer rate		2.458 megabytes/second
Recording code		RLL
Interface code		NRZ
Interface		Modified SMD
Head positioning method		Servo-controlled track-following
Start time		40 seconds
Stop time		15 seconds

RELIABILITY SPECIFICATIONS

		M2361A
Mean-time-between-failures (MTBF)		20,000 power-on hours
Mean-time-to-repair (MTTR)		Less than 30 minutes
Component life		5 years
Error rates	Recoverable errors	10 per 10 ¹¹ bits read
	Unrecoverable errors	10 per 10 ¹⁴ bits read
	Seek errors	10 per 10 ⁸ seeks

PHYSICAL SPECIFICATIONS

		M2361A	
		50 Hz±2 Hz	60 Hz±2 Hz
Power requirements	100 VAC±10%	6.0 A	5.7 A
	120 VAC±10%	4.8 A	4.6 A
	200 VAC±10%	3.1 A	3.0 A
	220 VAC±10%	2.9 A	2.9 A
	240 VAC±10%	2.6 A	2.6 A
Dimensions	Height	264 mm (10.4 in)	
	Width	483 mm (19.0 in)	
	Depth	770 mm (30.3 in)	
Weight		80 kg (176.4 lb)	
Ambient temperature	Operating	10°C to 40°C (50°F to 104°F) Less than 10°C (18°F)/hour	
	Not operating	-40°C to 60°C (-40°F to 140°F) Less than 20°C (36°F)/hour	
Relative humidity	Operating	20% to 80% (non condensing)	
	Not operating	5% to 95% (non condensing)	
Vibration	Operating	Max. 0.2G (5 Hz to 50 Hz) Max. 1G (50 Hz to 500 Hz) Shock: max. 2G (max. 10 ms)	
	Not operating	Max. 0.2G (5 Hz to 50 Hz) Max. 1G (50 Hz to 500 Hz) Shock: max. 3G (max. 10 ms)	
	Storage or transit	Shock: max. 5G (max. 30 ms)	
Altitude	Operating	3,000 m (10,000 ft)	
	Not operating	12,000 m (40,000 ft)	

Specifications are subject to change without notice. For the latest information, contact your local Fujitsu representative.

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