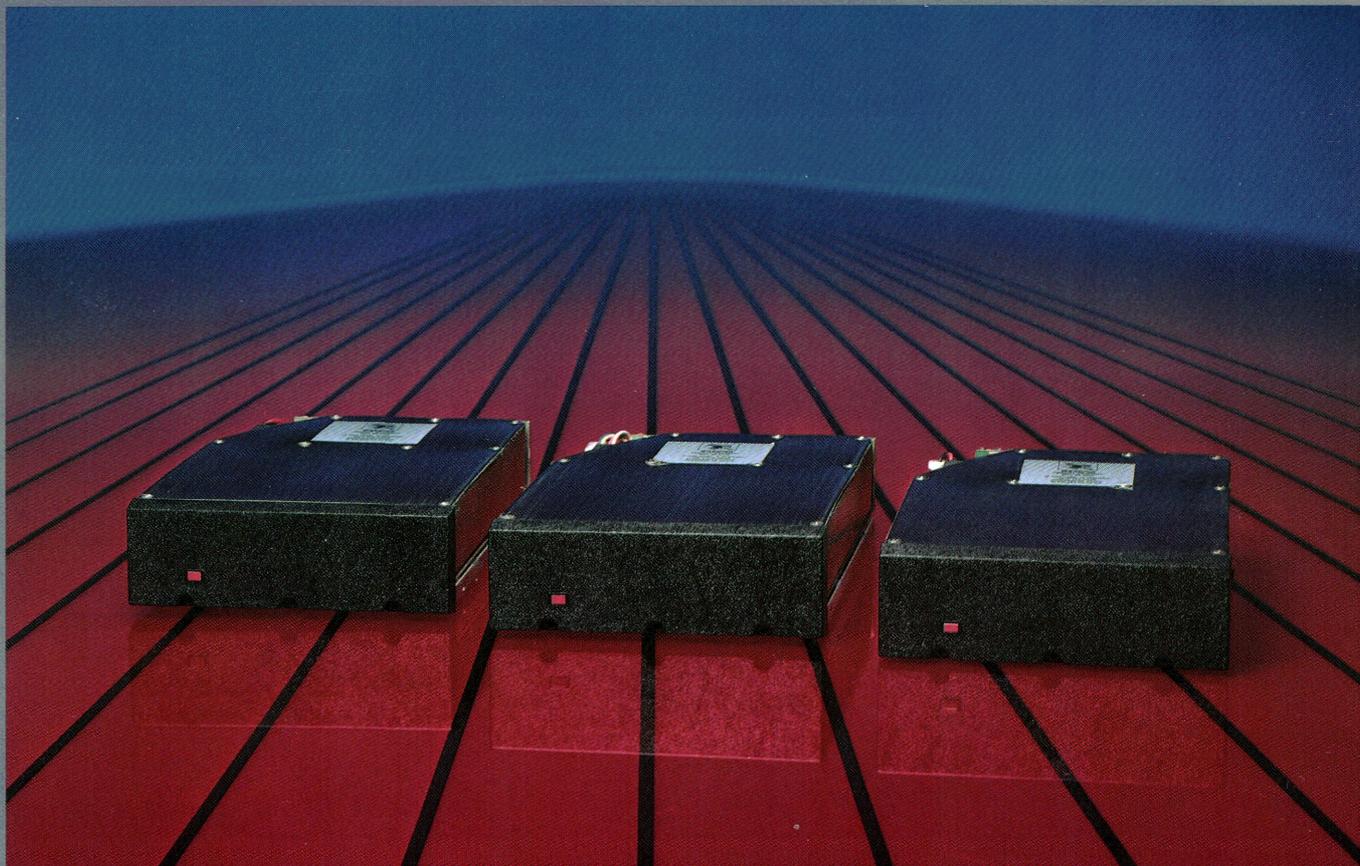




SyQuest
TECHNOLOGY

SQ306F
SQ312F
SQ325F



Half-height Winchester fixed disc drives.

Capacities to 25.5 megabytes, plated media, embedded servo, and power dissipation of 13 watts.

SyQuest drives give you a better fit. Mount SyQuest half-height drives almost anywhere. Under a keyboard. In your terminal. Fit two in one minifloppy space. SyQuest drives are only 1.625 inches high, 4.8 inches wide, and 8 inches deep.

Big capacities. Choose from three fixed disc capacities—6.38, 12.75 and 25.5 megabytes (unformatted) to match a wide range of applications. Offer an easy upgrade to your customers. Mix capacities and gain high volume discounts.

Easy integration. SyQuest drives have the same pin-outs, timing, data transfer rates, and track/sector formatting as industry-standard 5.25" Winchester drives. Use standard Winchester controllers and interfacing procedures, standard minifloppy DC power supplies.

Better price/performance. SyQuest delivers high capacity with proven Winchester heads, precision positioning, brushless motors and air filtration. Buffered seek reduces average seek time to 85-90 msec. But the cost is less than comparable 5¼" Winchesters.

Better reliability. Advanced Winchester technology seals media away from dust, smoke and other contamination. Chromaflux™ graphite coated thin film metallic alloy discs add even more protection against contamination. This thin film plating with lubricated coating shields against dirt, allows denser packing of data, and protects recording media and heads from "head crashes."

The unique digital servo system locks the read/write heads over the centerline of the appropriate recording track. It is transparent to the user thus allowing flexibility in sector formatting. The system builder can define the number of bytes per sector to match any format requirement.

Better performance. The digital servo, is supported by on-board microcomputer control and microstepping positioner. This speeds access and improves accuracy. The microstepping positioner steps in increments of 0.9 degree rather than the conventional 1.8 degrees. The drive's microcomputer reads servo information, corrects for track alignment, and adjusts the stepper within 75 micronches... all at sixty times a second.

Compatible cartridge drives. SyQuest removable cartridge drives (SQ306RD) offer convenient backup, program loading and transport. Form factor and operating specifications in common with fixed disc drives simplify integration. Cartridges available in 6.38 megabyte ca-

capacity. One fixed disc drive and one cartridge drive can share one minifloppy space.

Features and Benefits

- 6.38, 12.75 or 25.5 megabytes (unformatted)
- Standard transfer rate (5 Mbits per second)
- Access time (average) of 85-90 msec
- Variable sector format
- Half-height form factor
- Buffered seek mode
- Closed-loop embedded digital servo
- Industry-standard ferrite heads
- Industry-standard 5¼" HDD interface
- Same DC power as minifloppy
- Heat dissipation only 13 watts (45 BTU per hour)

SyQuest Fixed Disc Drive Specifications

		SQ306F	SQ312F	SQ325F
Capacity (unformatted)	Per drive (MB)	6.38	12.75	25.5
	Per surface (MB)	3.19	6.38	6.38
	Per track (Bytes)	10416	10416	10416
Capacity (formatted)	Per drive (MB)	5.0	10.0	20.0
	Per surface (MB)	2.5	5.0	5.0
	Per track (Bytes)	8192	8192	8192
	Per sector (Bytes)	256	256	256
Data transfer rate	Mbits per second	5	5	5
Average latency	msec	8.46	8.46	8.46
Access time (msec) (Includes Settling Time)	Track to track	25	18	18
	Average	90	85	85
	Maximum	205	200	200
Functional specifications	Rotational speed (rpm)	3547 ± 1%	3547 ± 1%	3547 ± 1%
	Recording density (bpi)	12000	12500	12500
	Flux density (fci)	12000	12500	12500
	Track density (tpi)	435	750	750
	Cylinders	306	612	612
	R/W tracks	612	1224	2448
	Surfaces	2	2	4
	Discs	1	1	2

Common Features

Power requirements	DC	+ 12 volts ± 5% @ .7 amps
	AC	+ 5 volts ± 5% @ .9 amps
	Power dissipation: watts	13
	BTU/hr	45
Environmental limits (operating)	Ambient temperature: (F)	40° to 122°
	(C)	5° to 50°
	Relative humidity (%)	8 to 80
	Wet bulb, maximum (F)	78°, non-condensing
	Maximum altitude (feet)	10,000
Mechanical dimensions	Height (inches)	1.625
	Width (inches)	4.80
	Length, including PCB (inches)	8.0
	Weight (lbs)	2.4
	Height (mm)	41.3
	Width (mm)	122
	Length, including PCB (mm)	203
	Weight (kg)	1.09



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