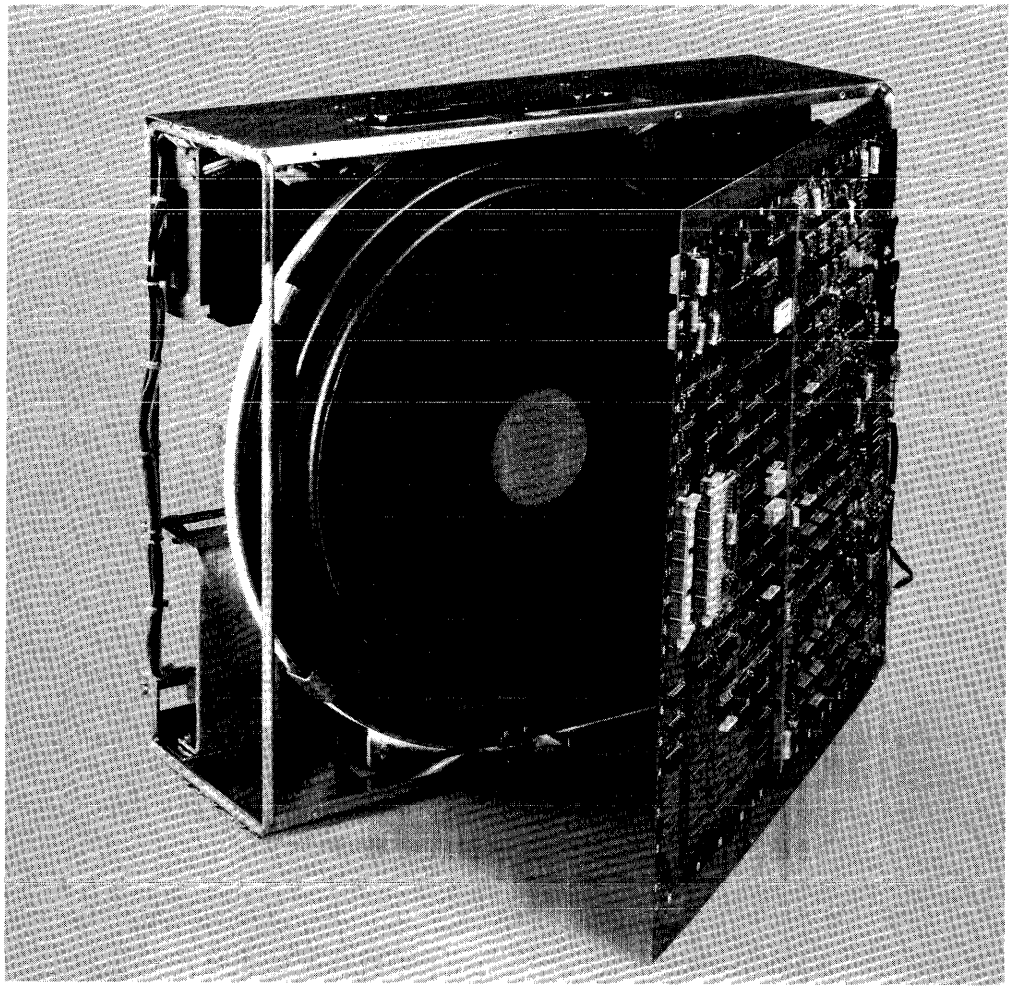


BY THE NUMBERS, PRIAM WINCHESTER DISC DRIVES ADD UP TO EFFICIENT, LOW-COST DATABASE!

Only PRIAM gives you low-cost Winchester disc drives with capacities from 10 to 158 megabytes, all operating from a common interface. At the upper end of this unequalled spectrum are PRIAM's DISKOS 3350, 6650, and 15450. This trio of advanced Winchester technology products makes eminent sense in their use of a single interface, a single small package size, and a single reliable design.

LINEAR VOICE COIL, FULLY SERVOED HEAD POSITIONING

Utmost reliability and the precision required for high-density data storage are achieved in PRIAM disc drives through fully servoed, linear voice coil head positioning. Using IBM 3350-level Winchester technology on a single disc as a starting point for the 34-megabyte DISKOS 3350, PRIAM has doubled track density for the 68-megabyte DISKOS 6650, and doubled the number of discs for the 158-megabyte DISKOS 15450. PRIAM's proprietary positioner design results in overall dimensions of 7" x 17" x 20" for all three drives.

BRUSHLESS DC SPINDLE MOTOR

The simplest spindle drive possible is provided in all three 14-inch PRIAM drives: the brushless DC motor. No belts or pulleys, no mechanical brakes or relays, no motor changes for different power frequencies. And PRIAM's crystal-reference spindle speed control makes the drive virtually immune to power supply frequency or voltage variations.

POSITIVE PRESSURE AIR FILTERING SYSTEM

PRIAM's proprietary positive-pressure air filtering system is unusual in its creation of a higher pressure inside the sealed head/disc cavity than outside. With design innovations, PRIAM has succeeded in extending this higher pressure to the point most vulnerable to contamination, the spindle bearings. This assures you of the highest long-term reliability and data security presently available in disc drives of any type.

MICROPROCESSOR CONTROL

Improved efficiency, higher reliability and lower cost result from PRIAM's microprocessor control of important drive operations. Head seeks, power sequencing and self-test and diagnostics are controlled by the microprocessor, reducing parts count and improving system flexibility.

PRIAM

FOR MORE DETAILS ABOUT THE PRIAM DISKOS 3350, 6650, and 15450 WINCHESTER DISC DRIVES, SEE THE REVERSE SIDE.

WELDED STEEL ROD FRAME

PRIAM's innovative steel rod and sheet metal frame improves reliability through improvement of air circulation. It also makes the PRIAM drives lighter, easier to install, and lower in cost. Heavier, cast metal is concentrated in the head/disc assembly where rigidity and stability are of utmost importance. Shock mounts between the casting and frame isolate the drive from the vibration and shocks of computer installations.

ALL-DC POWER

With their DC-only requirements, PRIAM disc drives can be used anywhere in the world without motor changes or other modifications. If PRIAM's optional, built-in supply is used, input power flexibility still permits DISKOS drives to be used anywhere in the world.

INTERFACE FLEXIBILITY

Interfacing to new or existing controllers is easy and economical with PRIAM disc drives. PRIAM's standard interface is designed for lowest cost and most efficient use with microprocessor-based systems. Up to four drives may be daisy-chained, and seeks may be overlapped.

SMD INTERFACE OPTION

An optional interface is available to permit PRIAM drives to be used with existing Storage Module Drive controllers. Integrated into the DISKOS single PCB assembly, the SMD interface extends the life of existing controllers and puts Winchester disc drive benefits into your systems quickly and easily.

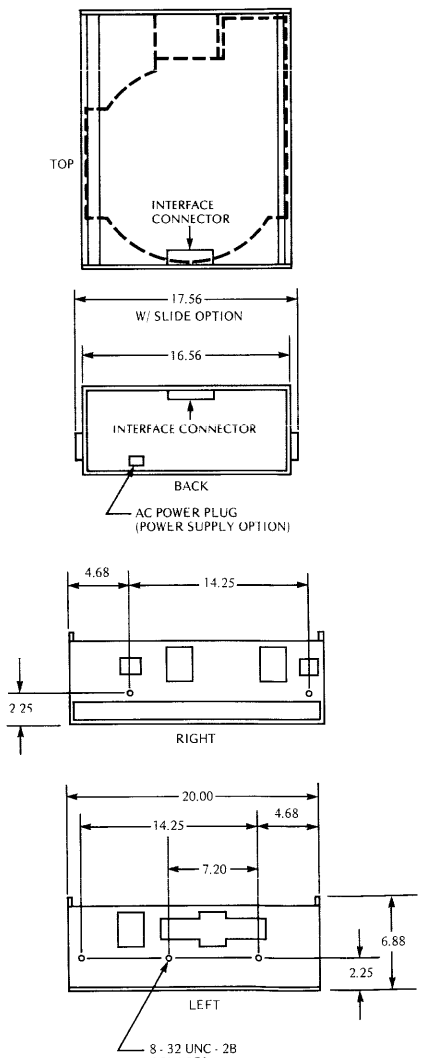
SMART INTERFACE OPTION

Integration of the DISKOS 3350, 6650, or 15450 into systems is greatly simplified, and cost is reduced, through the use of PRIAM's SMART Interface. Through a simple adapter to the I/O bus at the byte level, the SMART Interface controls up to four drives, serializes and deserializes data, formats, provides polled or interrupt operation, and sector buffering. It also includes defect mapping, implied seek, overlapped commands, selectable sector sizes, and microdiagnostics. Your controller design cost and the time required are reduced to quick and easy adaptation to your bus.

OPERATING CHARACTERISTICS	DISKOS 3350	DISKOS 6650	DISKOS 15450
Capacity (unformatted)	33.9 Mbytes	67.8 Mbytes	158.2 Mbytes
Capacity—SMD (unformatted)	33.9 Mbytes	61.9 Mbytes	144.5 Mbytes
Bytes per track	20,160	20,160	20,160
Bytes per cylinder	60,480	60,480	141,120
Number of cylinders	561	1121	1121
Number of cylinders—SMD	561	1024	1024
Single track seek time	8 ms	8 ms	8 ms
Average seek time	45 ms	45 ms	40 ms
Maximum seek time	85 ms	85 ms	75 ms
Average latency time	9.7 ms	9.7 ms	9.7 ms
Recording density	6430 BPI	6430 BPI	6430 BPI
Track density	480 TPI	960 TPI	960 TPI
Data transfer rate	1.04 MB/sec	1.04 MB/sec	1.04 MB/sec
Recording mode	MFM	MFM	MFM
Interface data code	NRZ	NRZ	NRZ
Recoverable error rate		1 in 10^{10} bits for all models	
Nonrecoverable error rate		1 in 10^{13} bits for all models	
Seek error rate		1 in 10^{6} seeks for all models	
Start time (seconds)	30	30	50
Stop time (seconds)	30	30	50
MTBF (power-on hours)	8000	8000	8000
MTTR (minutes)	30	30	30
Preventive maintenance	none	none	none

PHYSICAL CHARACTERISTICS	DISKOS 3350	DISKOS 6650	DISKOS 15450
Height (inches)	6.9	6.9	6.9
Width (inches)	16.6	16.6	16.6
With slides	17.6	17.6	17.6
Depth (inches)	20.0	20.0	20.0
Weight (pounds)			
With power supply	52	52	55
Without power supply	34	34	37
Add pounds for slides	6	6	6

DC POWER REQUIREMENTS		DISKOS 3350	DISKOS 6650	DISKOS 15450
+24 VDC	Maximum	7.0A	7.0A	7.0A
	Seeking	5.5	5.5	6.0
	Nonseeking	4.0	4.0	4.5
+5 VDC	Maximum	4.0	4.0	4.0
	Maximum with Adapters	6.0	6.0	6.0
	Typical	1.5	1.5	1.5
−5 VDC	Maximum	2.0	2.0	2.0
	Typical	1.0	1.0	1.0
−12 VDC	Maximum	0.7	0.7	0.7
	Typical	0.5	0.5	0.5



PRIAM

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