

PRIME

4475 Fixed Media Disk Subsystem

Features

315Mb low cost on one unit (formatted capacity of 293 Mb)

Winchester sealed environment for reliable operation

Emulates Prime's 300Mb removable pack devices with improved access time

High speed performance

10.5 inch rack-mountable with up to three devices per peripheral cabinet

Can be combined with other Prime disks on one controller

Up to four devices per controller; up to 16 devices per system (on 4 controllers)

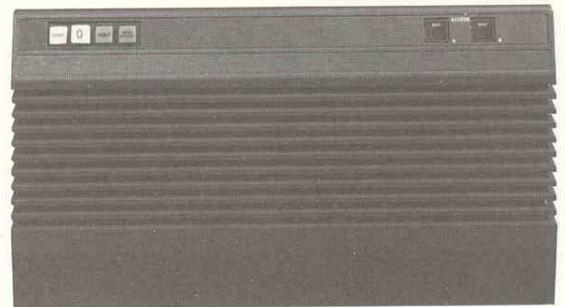
Microprocessor-based control system within each device

Error correcting code to ensure high data integrity

Modular construction requires no scheduled maintenance

Supported by the PRIMOS® operating system

Compatible with all Prime 50 Series systems



Description

The Prime 315Mb disk subsystem is designed to complement the Prime 50 Series systems by providing improved price/performance storage to meet the need for mid-range, on-line data requirements. The 315Mb disk is a rack-mountable, fixed media Winchester disk capable of storing 292.7 Mb of data. The device is small enough to allow up to three devices in one peripheral cabinet, the same space required for one removable pack disk drive.

The 4475 disk subsystem is specifically designed to emulate Prime's 300Mb removable pack subsystems, but offers improved access time. The 300Mb removable pack device can be integrated with the 4475 to expand on-line storage and provide compatible back-up on the removable media.

Because all Prime systems are compatible, the 4475 disk subsystem is supported by the same controller as other Prime disks (CMD, SMD, FMD).

Performance Features

The performance characteristics of the 4475, such as 25ms average seek time and 1.2 Mb transfer rate, ensure that data can be efficiently stored and retrieved.

Prime software permits seek operations on multiple drives to be overlapped with a seek or data transfer operation on one other drive. If the system is configured with two controllers, two data transfers can occur simultaneously.

Burst mode I/O, standard on Prime's higher end systems, further enhances transfer performance.

Reliability, Maintainability, Data Integrity

The most common cause of disk drive failure is particle contamination of the sensitive data storage mechanism. The Prime 4475 Fixed Media Disk maximizes reliability with a sealed, contamination-controlled disk compartment that reduces particle count and significantly reduces the failure rate.

Low total cost-of-ownership was designed into this device. Modular construction of major electronic sub-assemblies provides quick, easy fault identification and replacement. A dual port interface is included as standard equipment to simplify off-line testing without reducing system availability. No scheduled preventative maintenance is required.

The Prime 4475 Fixed Media Disks provide high data integrity with an error correction code to ensure that media defects and error-bursts of up to 11 bits are corrected. Cyclic redundancy and byte parity checks are also performed on all data fields to detect any errors that cannot be corrected automatically.

Configuration Flexibility

All Prime high performance disk drives, fixed as well as removable, are supported by the PRIMOS operating system and utilize the same controller. Therefore, a mix of devices can be configured on the same system with only one controller.

Since the 4475 is rack-mountable, the device can share a cabinet with a NRZI/PE tape drive. Additionally, up to three 4475 devices can be mounted in one expansion cabinet. The 4475 may also be mixed with other rack mountable devices such as a Prime Streaming Magnetic Tape device.

The 4475 can be configured on all Prime 50 Series systems, from the 250-II to the 9950. Therefore, CPU capacity can be easily upgraded while I/O equipment investments are protected.

Specifications**Operating**

Formatted Capacity (Bytes):	292.7 M
Bytes/Sector:	2080
Sectors/Track:	9
Tracks/Drive:	15637
Cylinders/Drive:	823
Average Latency Time (MS):	8.3
Minimum Seek Time (MS):	6
Average Seek Time (MS):	25
Maximum Seek Time (MS):	50
Transfer Rate (Bytes/Second):	1.2 M

Physical

Weight:	115 pounds/52 KG
Mounting:	EIA rack, 10.5 inches

Electrical (Device)

115VAC 60HZ start current:	16 amps
115VAC 60HZ run current:	4 amps
220VAC 50HZ start current:	11 amps
220VAC 50HZ run current:	3 amps

220VAC 50HZ run current:

Input Power: 3 amps
115 VAC + 10%
- 15%
220 VAC + 10%
- 15%

Heat: 1570 BTU/hr.
Regulatory: UL and CSA
FCC Compliant

Environment

Operating Temperature: 10° to 40°C (50° to 104° F) with maximum gradient of 10°C (18°F) per hour
non-condensing

Operating Humidity: 10 to 90%
non-condensing

Operating Altitude: - 1,000 to 10,000 Ft.
(- 305 to 3050M)

Non-Operating Temperature: - 40° to 60°C (- 40° to 140°F) with maximum gradient of 20°C (36°F) per hour
non-condensing

Non-Operating Humidity: 5 to 95%
non-condensing

Non-Operating Altitude: - 1,000 to 40,000 Ft.
(- 305 to 12,200M)

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