XEM1 – A/B

SMD DRIVE EMULATION SYSTEM

Replacement of SMD and SMD-E Disk Drives

Dual Rack Mount XEM1 A/B with Tape Backup (L) and Disk to Disk Copy (R)

Featuring

- SMD thru SMD-E interface compatibility (Replace also CMD [Phoenix] and Lark)

- 8 MB to 4.2 GB capacity – Defect Free

- Data transfer rates up to 24 Mbits per second

- Single Port or Dual Port

- Available with fixed, removable, or Jaz drive

- Rack Mount or Table Top enclosure

- Data Erase per DoD5220.22-M

- Continuous Self-test

New capabilities Upgrade SMD drives

Optional Features

-100% Verified Backup to second disk, 4mm DAT, QIC tape, Jaz, or Magneto-Optical disk

- RAID-1 Internal Mirroring and On-line Copy

- Multiple Volumes on a single drive

- Internal UPS

Plug compatible with SMD or SMD-E Drives

No hardware or software modifications are required to use the latest SCSI drives on SMD or SMD-E controllers. Unplug the existing SMD disk drive and install the XEM-1 A/B, using the same cables. Requires no changes to the diagnostics or operating software.

The XEM-1 A/B replaces most disk drives that use the industry standard SMD or SMD-E interface. It can be configured to emulate drives from Ampex, Century Data, Control Data, Imprimis/Seagate, Fujitsu, Hitachi, memorex, NEC, Pertec, Priam, Wang,… and many others.

P.A de Villejust – 9, place Marcel REBUFFAT – F-91971 COURTABOEUF 7 CEDEX FRANCE
tél. +33 (0)1 69 31 01 01 – fax. +33 (0)1 69 31 01 10 – e-mail: bienvenue@datex.fr – site web: www.datex.fr
S.A.S. Au capital de 160.000€ - R.C.S EVRY 331 142 018 – SIRET 331 142 018 00026 – NAF 725Z – Int.TVA n°FR 81 331 142 018

DATA STORAGE

Tel +33 1 69 31 01 01
Fax +33 1 69 31 01 10

Many configurations available

The XEM-1 A/B is a modular system and is available with numerous options. Two separate SMD drives can be emulated within one dual XEM-1 A/B enclosure. Rack mount, table top, and custom mounting configurations are available.

Cache buffering for fast access to Data

Up to 64 MB of data caching provides significantly reduced access times to common data. Cache is managed by a " Least Recently Used Track" algorithm.

High data transfer rates

Some host controllers are capable of data transfer rates well beyond those of the original SMD disk drive. The XEM-1 A/B supports up to 24 Mbits per second which can provide a threefold increase in transfer rate when used with some controllers.

Off-line back-up, disk copy

The off-line backup option allows the user to backup, copy, and verify the SMD image to a disk, tape, or cartridge unit. A 300 MB image can be copied in as little as five minutes to another removable SCSI or jaz drive. Backing up the same 300 MB image to an internal 4mm DAT or QIC tape take as little as 10 minutes.

Disk mirorring

RAID-1 internal Disk to Disk Mirroring is another option to the XEM-1 A/B. Alternating reads continually assure the user of a valid mirror. Internal Disk to Disk Mirroring also provides on-line, continuous backup of critical data.

Reduced power and cooling

The XEM-1 A/B uses significantly less power and requires less cooling than the older SMD drives it replaces, up to 95% less in some cases. Floor space requirements can also be reduced up to 95%.

Multi-volume option

With the Multi-Volume Option users can partition the SCSI drive to create multiple volume. The supporting software also allows for copying between volumes. The external Multi-Volume switch indicates the selected active volume.

DATA STORAGE

Tel +33 1 69 31 01 01
Fax +33 1 69 31 01 10

XEM1 – A/B

SMD DRIVE EMULATION SYSTEM

Replacement of SMD and SMD-E Disk Drives

Ease of use

Users controls and indicators are similar to the original SMD disk drives. Operators already familiar with the various SMD drives will find the XEM-1 A/B easy to work with.

Flexible architecture

The XEM-1 A/B uses a combination of microprocessor control and Field Programmable Gate Array logic for optimum performance and flexibility. As a result, configuration changes and field upgrades can easily be implemented as software/firmware changes.

User configurable

Drive emulation parameters may be changed by the user through an RS-232 serial port. For example; number of heads, cylinders, track size, etc., can be changed by the user. This allows the XEM-1 A/B to be reconfigured in the field to emulate any one of many SMD drive models. Software updates and some optional features can be installed in the XEM-1 A/B downloading from a DOS compatible PC.

Maintenance free

The XEM-1 A/B carries a 2 years warranty and uses the latest technology SCSI disk drives for low maintenance operation.

Interface

SMD, SMD-0, SMD-H, SMD-X, SMD-E. Single port standard, dual port optional. Daisy-chain interface compatibility.

Control/Maintenance: RS-232 serial port, ASCII DB-9 or Modular connector.

Data transfer rate

6 to 24 Mbits per second. Crystal controlled.

P.A de Villejust – 9, place Marcel REBUFFAT – F-91971 COURTABOEUF 7 CEDEX FRANCE
tél. +33 (0)1 69 31 01 01 – fax. +33 (0)1 69 31 01 10 – e-mail: bienvenue@datex.fr – site web: www.datex.fr
S.A.S. Au capital de 160.000€ - R.C.S EVRY 331 142 018 – SIRET 331 142 018 00026 – NAF 725Z – Int.TVA n°FR 81 331 142 018

DATA STORAGE

Tel +33 1 69 31 01 01
Fax +33 1 69 31 01 10

XEM1 – A/B
SMD DRIVE EMULATION SYSTEM
Replacement of SMD and SMD-E Disk Drives

Emulation	All parameters programmable
Cylinders	1024 max SMD
	2048 max SMD-0
	4096 max SMD-E
Heads	64 max SMD
	32 max SMD-E
Track length	30,720 or 61,440 Bytes max
	(Soft sectored)
	32,768 or 65,535 Bytes max
	(Hard sectored)
Sector Length	Programmable
	0 – 32,768 Bytes

Cache buffer

Size	2 to 64 MB
Capacity	64 to 1024 Tracks

Seek times Drive and emulation Dependent

Track to Track	0 – 20 ms
Average	4 – 18 ms
Maximum	20 – 30 ms
Average Access	11 – 28 ms
Average Latency	6.2 – 8.4 Ms

Reliability

MTBF	200,000+ hours
MTTR	15 minutes

P.A de Villejust – 9, place Marcel REBUFFAT – F-91971 COURTABOEUF 7 CEDEX FRANCE
tél. +33 (0)1 69 31 01 01 – fax. +33 (0)1 69 31 01 10 – e-mail: bienvenue@datex.fr – site web: www.datex.fr
S.A.S. Au capital de 160.000€ - R.C.S EVRY 331 142 018 – SIRET 331 142 018 00026 – NAF 725Z – Int.TVA n°FR 81 331 142 018

DATA STORAGE

Tel +33 1 69 31 01 01
Fax +33 1 69 31 01 10

XEM1 – A/B
SMD DRIVE EMULATION SYSTEM
Replacement of SMD and SMD-E Disk Drives

Power

Input voltage	90 – 135, 180 – 264 VAC (Selectable)
Frequency	47 – 63 Hz
Power	50 – 90 Watts (Maximum)
PHYSICAL	High x Wide x Deep, Weight
Rack Mount	5.25 in. X 19 in. x 25 in., 35 lbs
	133 mm x 483 mm x 635 mm, 15.9 kg
Table Top	13.5 in. X 7.5 in. x 17 in., 29 lbs
	343 mm x 191 mm x 432 mm, 13.2 kg
Drive Module	1.7 in. X 4.6 in. x 8.2 in., 3 lbs
	4.2 mm x 117 mm x 208 mm, 1.4 kg

Specifications subject to change without notice.

Common options

Opt-21	Dual Port SMD Interface
Opt-25	Multi-Volume Support
Opt-30	Internal UPS
Opt-41	Syquest (250 MB) Image Copy/Backup
Opt-46	Jaz Drive (1GB) Image Copy/Backup
Opt-51	Disk to Disk Image Copy
Opt-55	RAID Disk Mirroring and On-Line Copy
Opt-6X	Disk to Tape Backup (DAT, QIC)
Opt-7X	Disk to MO Disk Backup (Magneto-optical)

P.A de Villejust – 9, place Marcel REBUFFAT – F-91971 COURTABOEUF 7 CEDEX FRANCE
tél. +33 (0)1 69 31 01 01 – fax. +33 (0)1 69 31 01 10 – e-mail: bienvenue@datex.fr – site web: www.datex.fr
S.A.S. Au capital de 160.000€ - R.C.S EVRY 331 142 018 – SIRET 331 142 018 00026 – NAF 725Z – Int.TVA n°FR 81 331 142 018