



## USE SCSI DRIVES ON HONEYWELL CONTROLLERS

### AEM-3, Plug-Compatible replacements for HISI disk drives.

#### Featuring:

- Honeywell HISI interface compatibility
- 8 MB to 4.2 GBytes capacity - Defect Free
- Data transfer rates up to 10 Mbits per second
- Available with fixed, removable, or Jaz drive
- Rack Mount or Table Top enclosure
- Quiet Operation
- Data Erase per DoD 5220.22-M
- Continuous Self-test.

### NEW capabilities Upgrade HISI drives.

#### Optional Features:

- Backup to second disk, 4 mm 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 HISI Interface**

No hardware or software modifications are required to use the latest SCSI drives on Honeywell controllers. Unplug the existing disk drive and install the AEM-3, using the same cables. Requires no changes to the diagnostics or operating software.

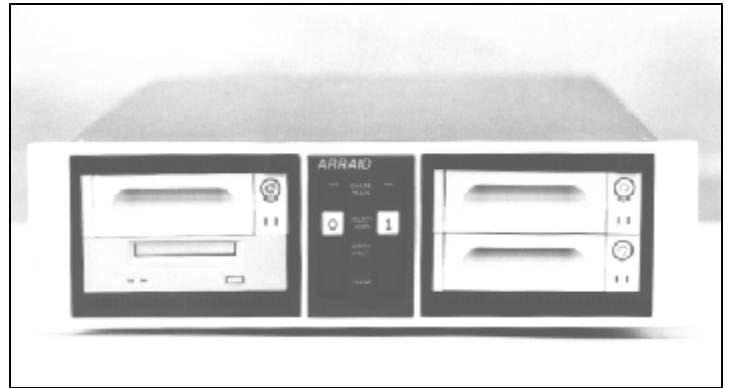
The AEM-3 replaces most disk drives that use the industry standard Honeywell interface. It can be configured to emulate drives from Control Data, MPI, and Honeywell.

#### **MANY CONFIGURATIONS AVAILABLE**

The AEM-3 is a modular system and is available with numerous options. Two separate HISI drives can be emulated within one dual AEM-3 enclosure. Rack mount, table top, and custom mounting configurations are available.

#### **CACHE BUFFERING for FAST ACCESS to Data**

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



*Dual Rack Mount AEM-3 with Tape Backup (l) and Disk to Disk Copy (r)*

#### **HIGHER DATA TRANSFER RATES**

Some host controllers are capable of data transfer rates well beyond those of the original HISI disk drive. The AEM-3 supports up to 10 Mbits per second which can provide a threefold increase in transfer rate when used with certain controllers.

#### **OFF-LINE BACKUP, DISK COPY**

The off-line backup option allows the user to backup, copy, and verify the HISI image. A 300 MByte image can be copied in as little as five minutes to another removable SCSI drive or Jaz drive. Backing up the same 300 MB image to an internal 4 mm DAT or QIC tape takes as little as 15 minutes.

#### **DISK MIRRORING**

RAID-1 internal Disk to Disk Mirroring is another option to the AEM-3. 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 AEM-3 uses significantly less power and requires less cooling than the older HISI 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 MultiVolume Option users can partition the SCSI drive to create multiple volumes. The supporting software also allows for copying between volumes. The external MultiVolume switch indicates the selected active and bootable volume.

## EASE of USE

User controls and indicators are similar to the original HISI disk drives. Operators already familiar with the various HISI drives will find the AEM-3 easy to work with.

## FLEXIBLE ARCHITECTURE

The AEM-3 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.



Dual AEM-3 Table Top unit with Removable Drives, Disk to Disk Copy, and Tape Backup options.

## 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, sector size, etc., can be changed by the user. This allows the AEM-3 to be reconfigured in the field to emulate any one of many HISI drive models. Software updates and some optional features can be installed in the AEM-3 by downloading from a DOS compatible PC.

## MAINTENANCE FREE

The AEM-3 carries a 2 year warranty and uses the latest technology SCSI disk drives for low maintenance operation. Disk drives carry a 1 year warranty, plus the remaining manufacturer's warranty. Many drives are rated in excess of 500,000 hours MTBF.

## SPECIFICATIONS

### INTERFACE

Honeywell Information Systems Interface. 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 10 Mbits per second. Crystal controlled.

### EMULATION

*All parameters programmable*

Cylinders 1024 max

Heads 64 max

Track Length 30,720 to 61,440 Bytes max (Soft sectored)  
32,768 to 65,535 Bytes max (Hard sectored)

Sector Length Programmable  
0 - 32,768 Bytes

### CACHE BUFFER

Size 2 to 64 MBytes

Capacity 64 to 1024 Tracks

### SEEK TIMES, TYPICAL *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

### 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

43.2 mm x 117 mm x 2.8 mm, 1.4 kg

*Specifications subject to change without notice.*

## COMMON OPTIONS

- Opt-24 Additional Cache Memory
  - Opt-25 MultiVolume Support
  - Opt-30 Internal UPS
  - Opt-46 Jaz Drive 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
- More Options Available.*