# **Bering**

## **EconoPac™**

Hard Disk Subsystems For Hewlett-Packard Computers

Mass Storage Solutions For Legacy and New HP 9000 and 1000 Computers

**HP-IB** and SCSI Interfaces



EconoPac<sup>™</sup> **Hard Disk Drive Subsystems** (with Floppy Disk)



Replaces HP9153 Disk Drives

**EconoPac Hard Disk Drives** 

Bering's EconoPac hard disks drives (HDD) have been the backbone storage system for Hewlett-Packard technical and real-time computers for a long time, since 1981. They are used as the primary system or peripheral disk unit on HP 9000 and 1000 computer systems and in a variety of applications: ATE, CAD/CAM, test and measurement, scientific, engineering, and data processing. It's the necessary workhorse of every computer system.

Classic and Neo-Classic Bus Interfaces

There are EconoPac HDD solutions for HP's legacy HP 9000 and HP 1000 computer systems with their proprietary HP-IB interface. There are also newer SCSI HDD for HP's more current crop of HP 9000 Series 700 and HP 1000 A990 computers. Take your pick, we cover them all.

≈Replace HP 9153C Disk Drives≈

The Bering 87xx disk drive series has been tested and authorized by HP to replace the obsolete HP 9153 type disk drives. Important: the 2MB FDD is HP-compatible and supports single-sided or double-sided floppy diskettes for software distribution, data exchange, and backup.

"Drop-In" Compatibility
Installing and using your EconoPac on your HP
computer is a breeze. EconoPacs do not require
additional software utilities or need any hardware changes. You do not need to "regenerate" the operating system when installing the new diskjust plug it in, configure, and get going.

#### EconoPac and Bering●Box Models

There are three EconoPac groups.

EconoPac 89xx

HDD (200MB to 4.0GB) with HP-IB interface **EconoPac 87xx** 

HDD (200MB to 4.0GB) plus 3½" FDD (Floppy Disk Drive) with HP-IB interface (HP9153 Replacement)

Bering

Box 800H and 800HW HDD (4.5GB to 36GB) with SCSI interface (Narrow and Ultra-Wide) The 89xx and 87xx are the right choices for HP 9000 Series 200/300/500/800 running BASIC, PASCAL, or HP-UX operating systems and HP 1000 series with HP-IB interface running RTE-A, RTE-6, and IVB.

The third group includes SCSI HDD subsystems for workstations and HP1000 Real-Time computers. The Bering•Box (same EconoPac enclosure) are Ultra-Wide SCSI drives for HP 9000 Series 700 workstations running HP-UX or HP-RT and standard narrow SCSI subsystems for HP 1000 A-Series Computers. The Bering●Box 800H with Option 04 (4.5GB HDD with SCSI interface) has been tested and is approved by HP for the HP 1000 A400 and A900 series of Real-Time Computers.

**Storage Capacities** 

Bering qualifies the fastest and most reliable HDD in the commercial marketplace for use in the EconoPac subsystems. Storage capacities range from 200MB all the way up to 4.0GB for Bering legacy HP-IB storage products. The Bering•Box SCSI group for HP 1000 A and HP 9000 Series 700 Workstations.

#### **LCD Controls and Disk Utilities**

The EconoPac 89xx and 87xx include a front-panel LCD with push-button controls to use the system's built-in disk utilities. These utilities are useful for system configuration, set addresses, perform basic diagnostics, and to do off-line "disk-to-disk" copy functions.

HP Compatibility
Refer to Bering's Selection Guide on our website www.bering.com for specific O/S, Emulation, and Bus Interface support on HP 1000 and HP 9000 computers. Alternatively, you may call Bering directly for assistance in selecting the right storage system for you.

**Bering Technology, Inc.** is the mass storage specialist for Hewlett-Packard 9000 and 1000 computers since 1981. Our company provides hard disk, removable disk, and tape solutions for a wide range of HP legacy systems.

### EconoPac HDD Subsystem Specifications<sup>1</sup>

Models		Description	Interface	Disk Protocol
000	8902	EconoPac 200MB HDD, Single Drive	HP-IB	CS/80 and SS/80
	8905	EconoPac 500MB HDD, Single Drive	HP-IB	CS/80 and SS/80
	8920	EconoPac 2.0GB HDD, Single Drive	HP-IB	CS/80 and SS/80
	8940	EconoPac 4.0GB HDD, Single Drive	HP-IB	CS/80 and SS/80
000	8702	EconoPac 200MB HDD, 2MB FDD	HP-IB	CS/80 and SS/80
	8705	EconoPac 500MB HDD, 2MB FDD	HP-IB	CS/80 and SS/80
	8720	EconoPac 2.0GB HDD, 2MB FDD	HP-IB	CS/80 and SS/80
	8740	EconoPac 4.0GB HDD, 2MB FDD	HP-IB	CS/80 and SS/80

Performance	Power Requirements				
	<u>FDD</u>	HDD	•		
Formattad Canacity (MP) <sup>2</sup>	2.0MB	200MB to 36.0GB	Line Voltage	90-260V	
Formatted Capacity (MB) <sup>2</sup>			Line Voltage		
Avg. Seek Time (ms) <sup>2</sup>	94	10	Line Frequency	47Hz-440Hz	
Rotational Speed (RPM) <sup>3</sup>	300	7,200-10,000	Maximum Current	1.1 Amp	
Maximum HP-IB Speed (MB/sec) <sup>4</sup>	.32	1.0			
Maximum SCSI Speed(MB/sec) <sup>4</sup>	n/a	4.0			
MTBF (x1000POH)	60	500			

#### Miscellaneous

Rackmount HP Standard Rack or EIA/RETMA 19" Standard (Bering Model Numbers: ACCS-7206 for 8xxx/800)

Unit Dimensions Model 8xxx 3" x 12.8" x 14" (76mm x 325mm x 356mm)

Net Weight Up to 25 lbs. (11kg)

<sup>1</sup> All information is subject to change without notice.

<sup>2</sup> Minimum formatted capacity at 1024 bytes/sector.

Minimum rotational speed.

<sup>4</sup> All transfer rates are dependent on computer types and application environment.



EconoPac HDD Subsystem HP-IB Interface



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