

HEWLETT-PACKARD

The PORTABLE

It's a personal computer.

**HP Computer Museum**  
**[www.hpmuseum.net](http://www.hpmuseum.net)**

**For research and education purposes only.**

Only smaller.

# MEET The PORTABLE.

- Rely on 384 Kbytes permanent memory containing the system's software, including 1-2-3™ from Lotus™ and MemoMaker word processing.
- Juggle loads of data with 272 Kbytes standard user memory.
- Store or retrieve data six times faster with the built-in electronic disc.
- Run programs—thanks to the 16-bit 8086 microprocessor—up to twice as fast as an IBM PC.
- Access lots of software with industry-standard MS™-DOS, made easy by the Personal Applications Manager.
- Read or edit with ease on the 16-line-by-80-character display, one of the largest on any truly portable computer.





- Compute on the run with rechargeable batteries giving twice the battery life of any other 16-bit portable.
- Keep your work in a safe place, thanks to automatic memory protection. Keep tabs on how much juice you've got with the battery monitor.
- Put in a plug for yourself with the AC power cord/recharger.
- Hook up to standard peripherals through the RS-232C serial interface.
- Hook up to portable Hewlett-Packard peripherals through the HP-IL serial interface.
- Go ahead, take it along—this is the actual size, and it weighs under nine pounds.



Take a closer look.

The PORTABLE. It's as powerful as any personal computer that ever sat on a desk.

Except that this personal computer sits on your lap.

At just a tad under nine pounds, it's light enough to be taken anywhere.

But that doesn't mean it should be taken lightly.

Because we give you some powerful business software. Not just thrown in. Actually *built in*.

Popular 1-2-3™ from Lotus™ for file management, spreadsheets, and graphics. MemoMaker for quick and simple word processing.

The unique Personal Applications Manager eliminates the need to learn complicated commands and makes computer operation as simple as choosing from a menu. And the MS™-DOS (2.11) operating system provides industry-standard compatibility for access to dozens of optional application programs. Just add our battery-powered disc drive.

To make things even easier, help messages—on-screen sets of instructions—can guide you through a program. So you won't have to lug 10 pounds of manuals around with a nine-pound computer.

With its true 16-bit microprocessor, The PORTABLE from Hewlett-Packard runs software up to twice as fast as an IBM PC.

Twice.

It also has more than twice as much standard memory—272 Kbytes—as most desktop computers. So you'll have plenty of room to spread out a spreadsheet, or give your data due processing.

The PORTABLE's peripherals are just as amazing. And just as easy to carry. So you can add a 3½-inch, high-capacity microfloppy disc drive and the whisper-quiet ThinkJet Printer.

Each 5½-pounds light. Each battery operated. The *entire system* weighs less than most so-called "portables" that don't include printers.

Some day most personal computers will be designed this way.

But for now, the *only* personal computer that's designed this way is this one.

The PORTABLE from Hewlett-Packard.

The powerful, all-around personal computer. It just happens to be portable.



# Work where you want, when you want.

The PORTABLE was made for people who don't sit still.

Which makes it perfect for most people.

So whether you're working across the hall or across the country, you now have a perfect traveling companion.

The PORTABLE from Hewlett-Packard.

How's this for convenience?

While many so-called "portables" can put your strength to the test, The PORTABLE is only about the size of a notebook binder. And just about as easy to carry around.

With all the above, plus rechargeable batteries that give you up to two weeks of normal use on the road, it's the most powerful portable computer you can buy.

Also the most ingenious.

Say you're working with The PORTABLE, and you stop for a moment. If you don't touch the keys again within five minutes, it will go to sleep.

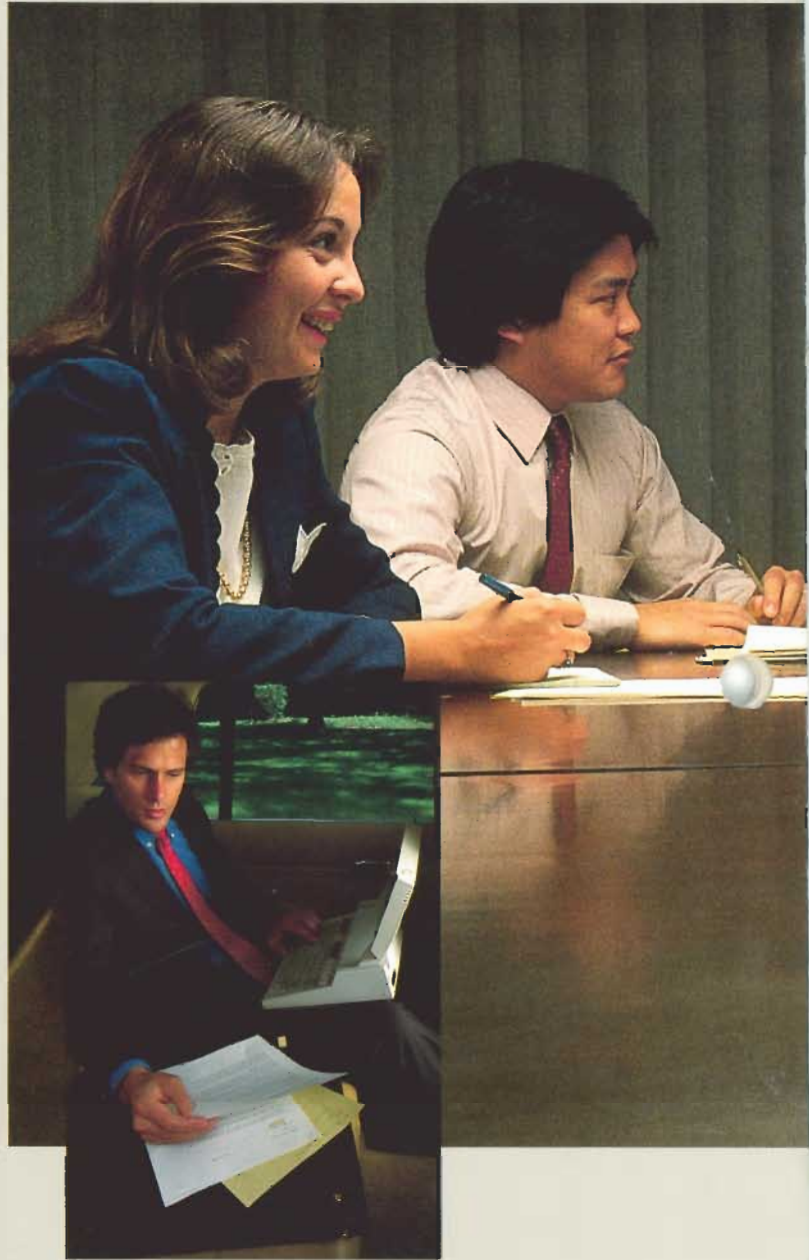
The screen shuts off. But the computer is just resting. Conserving its battery power.

Then just touch a key (any key will do), and The PORTABLE wakes up right where you left off.

The batteries are unique. They spend their energy at an even rate so power doesn't drop off suddenly—unlike most other portable computer battery systems. There's even a battery monitor that tells you how much power you have.

At 20 percent, you're reminded to recharge your batteries. When you get down to 5 percent, though, the system locks you out. For your own good. This way The PORTABLE still has enough power to keep your work intact. And you have several weeks to recharge it before you'd lose any information.

Any time you're near an electric outlet, you can plug in The PORTABLE with the AC power cord. Use it and recharge it at the same time.



▲ *Make every second count when you're on the way to a presentation.*

*Call up facts from your  
portable library when people  
need information.*





# It comes alive the moment you touch it.

Try it. Flip up the screen and touch a key.

The PORTABLE comes alive. Instantly. The built-in software ready to run.

Fast.

Now load a program and get to work in just five seconds—ten times faster than with conventional personal computers.

Besides, why not get what you want—*now*?

But instant gratification is only half the story.

The other half is software.

And what software!

We've got the only battery-powered portable that comes standard with 1-2-3™ from Lotus.

Graphics before your very eyes.

The recalculation time will amaze you. There's even the interactive 1-2-3™ Electronic Tutor that makes it easy for you to get up to speed.

The same goes for The PORTABLE's word processing program, MemoMaker. It's so simple! No complicated commands to remember. Reformat a paragraph or center a line just by pressing a key.

Because the software is built into permanent memory, virtually all user memory is available for doing a spreadsheet or editing text. You've got about twice as much work space as conventional PCs that run programs from a disc drive.

The RS-232C interface makes it easy to access other computers.

Should you want to exchange information with an HP 150 Touchscreen Personal Computer—or an IBM PC—The Portable-Desktop Link option makes it easy. Even exchange 3½-inch microfloppies using an HP 9114A disc drive. You can work on your 1-2-3 files in the field, and edit them at your leisure on your desktop computer back at the office.

Or perhaps you'd like to link up with and transfer files to an HP mini-computer, an IBM mainframe computer, or data bases. Or for that matter, link up with another PORTABLE owner.



You can do all of the above and more, because The PORTABLE's built-in terminal works with the direct serial interface.

Then there's the Personal Application Manager (P.A.M. for short). Like P.A.M. on the HP Touchscreen Personal Computer, P.A.M. on The PORTABLE makes routine housekeeping chores like copying files, formatting discs, and reading directories a breeze. P.A.M. does it all with special function keys that eliminate the need to memorize commands. And P.A.M. provides the date, time, and remaining memory and battery life to boot.

So there you have it. The software that comes with The PORTABLE. You may never need any more. But just in case...

The Personal Applications Manager makes it easy to tell The PORTABLE what to do.

Give your competition the old 1, 2, 3 with 1-2-3™ from Lotus™—with data management, spreadsheets (inset screen, top), graphics (middle), and help (bottom) should you need it.



### Check out all the programs in the HP software library

Since The PORTABLE system is as powerful as a desktop computer, it makes sense that it should run software that's just as powerful.

And it does.

So you can pick up industry-standard, bona fide, application software for The PORTABLE with the assurance that what you're getting is the real thing. Here are some of the applications currently available:

- Multiplan™ helps you make informed financial decisions.
- WordStar®, MailMerge™ and CorrectStar™ provide total text control.
- dBASE II™ offers powerful data base management.
- Series 100/BASIC, GW™-Basic, and Pascal from Microsoft® give you programming power.

- Microsoft® Chart™ makes boardroom-quality graphics available for enhancing your presentations.
- Zork® I-III, the popular games, open the door to the Great Underground Empire. Escape—if you can—with your life and the 20 treasures of Zork.
- And there's much, much more!



# How we squeezed an entire personal computer into a portable package.

This isn't the place to go into technical details. But we know you're interested in how the advanced technology built into The PORTABLE translates into real value for you.

We started with parts made by a process called CMOS. Parts made this way require very little power to run, including the soul of this new machine, a powerful 16-bit 8086 microprocessor. So we were able to combine the usually mutually exclusive qualities of speed and low-power operation.

And rather than build in a floppy disc drive making our PORTABLE less portable, we used a high-speed electronic disc. So you get the advantage of safe, fast data storage without the disadvantages of increased size and short battery life. And don't forget, we offer the equally portable HP 9114A microfloppy disc drive if you want to run optional software.

As a member of Hewlett-Packard's family of personal computers, The PORTABLE could be no less than innovative. It follows in the footsteps of the HP 150 Touchscreen Personal Computer. And after all, we wrote the book on small and powerful. Our financial and scientific calculators have long set the standards for the industry.

Our Touchscreen sets you free to use your personal computer more productively. The PORTABLE gives you the freedom to take PC power wherever you go.

And that's exactly what a portable computer is supposed to do.



▲ Use HP-IL for a quick and easy connection to battery-powered peripherals such as the HP 9114A microfloppy disc drive or the ThinkJet Printer.

*Pack up your office and take it  
with you when you're ready to  
hit the road.*



◀ *The PORTABLE's industry-  
standard RS-232C interface  
puts you in touch with  
our plotters.*

# You really *can* take it with you.

The 710-Kbyte (formatted), 3½-inch HP 9114A disc drive is small enough to fit in a briefcase, but stores a whopping amount of data. Each double-sided disc holds about 175 pages of single-spaced text. Or a payroll for up to 1,400 employees. Or the equivalent of the telephone white pages for a small town.

In short, with the 3½-inch disc, you can carry a drawer-full of files in your shirt pocket!

The disc drive weighs about 5½ pounds, and provides 8–12 hours of battery operation on a single charge.

It's a safe bet that in the very near future, *most* disc drives for personal computers will use the 3½-inch microfloppy disc. HP PCs *already* do. The 3½-inch disc offers greater storage capacity and higher reliability than the 5¼-inch.

The hard-case discs keep your data safe by preventing contamination from fingerprints, dust, and damage from

handling. A Media Protection System even tells you when you need to replace worn discs.

And then there's ThinkJet, the amazing Personal Printer from Hewlett-Packard. A printer for your thoughts. It prints 150 characters a second. That's a page a minute.

ThinkJet sprays ink through the printhead onto the paper. Since the printhead never touches the paper, there is no impact noise. The whole print mechanism is contained in a small, disposable cartridge that snaps simply into place. No mess, no fuss.

With graphics, underlining, and boldface capabilities. It's affordable printing in a 5½-pound, battery-powered package.



◀ **System to Go: The PORTABLE;** the 3½-inch, 710-Kbyte microfloppy disc drive; and the fast, quiet ThinkJet Printer provide a complete system solution.

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## HP PERIPHERALS

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### Disc Drive

The HP 9114A double-sided, 3½-inch, battery-powered microfloppy disc drive, 710-Kbyte capacity

### Printers

ThinkJet, The Personal Printer, ink-jet technology, HP-IL interface (HP 2225B)  
HP 82905B dot-matrix printer, option 448 with HP-IL interface  
HP 2932A dot-matrix printer with RS-232C interface  
HP 2934A dot-matrix printer, with RS-232C interface  
HP 2601A daisywheel printer, option 242 with RS-232C interface

### Plotters

HP 7470A two-pen graphics plotter, option 003 with HP-IL interface  
HP 7470A two-pen graphics plotter, option 001 with RS-232C interface  
HP 7475A six-pen graphics plotter, option 001 with RS-232C interface

### Interface Converters

HP 82164A HP-IL to RS-232C  
HP 82169A HP-IL to HP-IB

### Communications

HP 45643A Extended I/O Accessory (HP-IL and Centronics) to tie-in The PORTABLE with your HP 150  
HP 82973A HP-IL interface card to tie in The PORTABLE with your IBM PC.

### Accessories

HP 13269L leather carrying case (Vinyl carrying case included.)  
HP 13269K system carrying case to hold computer, printer, and disc drive

### Microprocessor/CPU

Full 16-bit, CMOS 8086, running at 5.33 MHz clock rate

### Memory

384K bytes of CMOS ROM  
272K bytes of CMOS RAM  
Up to 256K bytes user memory  
Up to 176K bytes electronic disc

### Software Built Into ROM

MS-DOS version 2.11  
Personal Applications Manager  
1-2-3 from Lotus: spreadsheet, graphics, and file management  
MemoMaker: word processor  
Terminal Emulation: communications and file transfer

### Display

16 line x 80 column LCD  
128 x 480 pixel, bit-mapped graphics  
Keyboard contrast control

### Keyboard

Typewriter-style  
75 keys, including eight special function keys

### Power Supply/Battery Life

Three permanently installed, lead/acid D-cell batteries  
16 hours of continuous use on a charge  
Over five years of service life

### Size/Weight

13" x 10" x 2⅞" (32 cm x 25 cm x 7 cm)  
8½ pounds (3.85 kg)

### Input/Output

Hewlett-Packard Interface Loop (HP-IL)  
Serial Interface (RS 232-C v.24/V.28)

### System Clock/Calendar

January 1, 1980 to December 31, 2039  
0.1 second resolution  
Alarm and appointment-keeping functions

### Temperature Constraints

32°–130°F (0°–55°C) while in storage  
32°–115°F (0°–45°C) while in operation

### Safety/EMI Approvals

UL Listed, CSA Certified  
FCC Class B parts 15 and 68  
Passes proposed RTCA standards for use on commercial aircraft

Complies with RTCA docket 160A section 21—radiated emission levels for computing devices. Category B: 150 KHz–30 MHz. Category A/Z: 30 MHz–1.215 GHz. The PORTABLE passes these proposed RTCA standards for use on commercial aircraft.

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