# HP measurement and computer advances



### The HP 3000 Series 33 computer system. Another innovation that, through advanced LSI technology, delivers major business system capability in a desk-styled package.

With the Series 33, Hewlett-Packard adds a low-cost, compatible member to its 3000 computer family: powerful systems that adapt to your operational requirements for the management of manufacturing and other business information.

A new, dramatic example of HP's advanced siliconon-sapphire (SOS) technology is the HP 3000 Series 33. Exhaustively tested and refined, SOS semiconductor chips give the Series 33 the related benefits of smaller size, greater performance, and lower cost than computers using traditional technologies.

This general-purpose major business system is especially well suited to on-line transaction processing applications such as order processing, inventory control, and material management. It is a relatively lowcost answer for many companies that can afford only one computer, or for larger organizations implementing distributed processing.

Its power can be simultaneously tapped by users at up to 32 terminals, and the Series 33 runs the same multiprogramming executive operating system—MPE-III, as the larger HP 3000 systems. This means the new Series 33 can immediately share in the thousands of man-years of software development for HP 3000 systems. The Series 33 also provides IMAGE/3000, HP's award-winning data base management software, and its easy-to-use QUERY capability. A new data entry software package, VIEW/3000, makes it easy for experts and beginners alike to create business forms on system video terminals and to enter data into files without writing a program.

The Series 33's system console includes a built-in diagnostic microcomputer for on-the-spot diagnostic testing. With a modem, HP service specialists can even communicate with the Series 33 by telephone for long-distance troubleshooting.

A base system includes the computer—now only three SOS chips on two printed circuit boards instead of nine printed circuit boards—256k bytes of errorcorrecting main memory, a 1 megabyte flexible disc, a 20 megabyte cartridge disc, and the system/ maintenance console. The Series 33 can grow with your needs to 1 megabyte of main memory, and can use up to 8 disc drives with 960 megabytes of disc storage. A wide range of peripherals—magnetic tape drives, printers, and terminals—further increase a user's ability to tailor an HP 3000 Series 33 to a specific application and changing it as operations demand. Prices start at \$70,000\*.

#### A working partnership with HP.

This informative management booklet outlines HP's approach to doing business. It summarizes the expertise, resources, support, and computer products we bring to customers. For a free copy write to A.P. Oliverio, Vice President, Marketing, Hewlett-Packard Co., 1504 Page Mill Rd., Palo Alto, CA 94304.

## extend your possibilities.



## A new printer and printing terminal: each sets a new performance/price standard.

A highly reliable 400 lpm line printer that fits most high-throughput computer applications, the HP 2608A features multiple character sets, graphics capability and outstanding print quality. At the other end of the spectrum, the HP 2621P is an interactive CRT terminal with an integral 120 cps thermal printer, ideal for the occasional walk-away copy. Both cost much less than you would expect for the performance they provide.

The HP 2608A is a dot matrix line printer that is rugged enough for EDP applications yet can be used in office environments. It produces high quality print thanks to a printing mechanism that operates virtually without friction and requires little maintenance. With 132 microprocessor-controlled print hammers—one for each print position—the 2608A forms each dot with equal force, producing characters and graphics that are free of ghosts, smears and light areas. Vertical and horizontal alignment is maintained to a precision usually found only in much more costly chain printers within 0:005 inch in graphics mode.

With as many as 16 resident character sets—any two of which may be used on any line—the 2608A prints each character from a  $5 \times 7$  dot matrix which is automatically adjusted for each character set and may be dou-



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For assistance call: Washington (301) 948-6370, Chicago (312) 255-9800, Atlanta (404) 955-1500, Los Angeles (213) 970-7500 bled under program control. In the graphics mode, it can plot a full-page display with a density of 781 dots/ cm<sup>2</sup> in less than 20 seconds. Forms control is accomplished through a 16-channel electronic vertical format control (VFC); standard channel assignments for 11-inch forms are automatically available from an internal ROM, or the user may define any desired format up to 127 lines by programming the VFC on the computer. A self-test/self-diagnostic routine is standard, and so is a cartridge ribbon with average life of 30 million characters.

The HP 2621P interactive terminal incorporates a high-resolution CRT, two full pages (48 lines) of memory, and 120 cps thermal printer which prints upper and lower case characters, underline, and control characters in a  $9 \times 15$  dot cell. Under keystroke or computer control, the printer produces hard copy of selected lines, the entire display or the entire 4K-byte memory. In data logging mode, it automatically prints all interactive dialog between terminal and computer.

Screen-labeled editing functions on the 2621P are designed to work in interactive applications without a need for software modifications. Even with the terminal in character mode, the user can edit the current line (or any line in memory) before transmission to the host computer. A built-in self-test verifies correct operation of the terminal, printer, and data communications. A separate model, the HP 2621A, provides the same features as the 2621P, but without the printer.

Prices start at \$9250\* for the 2608A line printer, \$2550\* for the 2621P terminal (with printer), and \$1450\* for the 2621A (without printer).

( ) HP 300	0 Series 33 comp	outer system	
	8 line printer		
( ) HP 262	1P printing term	inal	
Name			
Company			
Address			
City	State	710	