

or white on black. Users can edit inputs before they are entered into the system or before they are printed. When large amounts of data are on the screen, blanks can be inserted between display characters to separate the left or right 32 and make them easier to read. All special APL and BASIC characters can be displayed.

A 3M-type data cartridge (full-size configuration) serves as a removable medium for data and program storage. Up to 204,000 characters of data can be stored on its 300 ft of 1/4-in. tape. The data cartridge unit operates at 40 in./s in read, write, search, and rewind modes, yielding an effective read rate of 2850 char/s and a write speed with checking of 950 char/s. Each tape contains a file protect feature.

For systems requiring hard copy records or which have large file sizes, an optional external I/O adapter allows ready connect or disconnect of a matrix printer and/or an auxiliary tape unit. Hardcopy output can be provided by the optional 80-char/s, 132-print position matrix printer on single sheets, multiple copies, or multi-part paper. The model 5103 prints serially from both left to right and right to left, at 10 char/in. with 6-line/in. vertical line spacing. Print commands may originate in the user's program or from a keyboard function key. All or part of the information on the screen will be printed as determined by the user. Printer dimensions are 12 1/4 x 13 1/4 x 23" (31 x 34 x 59 cm); weight is 60 lb (28 kg).

The model 5106 auxiliary tape unit is an optional device for users who have extensive copy requirements or file sizes which exceed standard work space. Characteristics are the same as those of the data cartridge unit in the computer. The same cartridges can be used in both units. Size of the auxiliary tape unit is 7 1/4 x 10 x 12 1/4" (19 x 26 x 31 cm); weight is 18 lb (8.2 kg).

When the computer is used in communications mode as a terminal, it can communicate with most System/370's that support the IBM 2741 (start/stop) mode with extended binary code decimal (EBCD). With optional printer attached, standard 2741 printing capability is attained. The tape cartridge may be used to transmit and receive messages.

## Other Features

Installation of this computer consists of unpacking, plugging it into a grounded 115-Vac outlet, and checking it for proper operation through a series of tests described in the reference manual. The unit can be moved from office to office, rather than requiring users to bring their work materials to it. An optional carrying case with hand and shoulder straps provides environmental protection if the computer must be moved to another building or site.

Three optional Problem Solver Libraries are available in tape cartridges: mathematical problems (37 APL and 44 BASIC), statistical techniques (40 APL and 41 BASIC), and business analyses (30 BASIC). Each library contains frequently used interactive routines or functions. Capabilities for the three libraries include, respectively, solution of linear equations, eigenproblems for real matrices, and integration of first-order differential equations; data generation, elementary statistics, and regression and correlation; and cost studies, resource projections, and product profitability analyses.

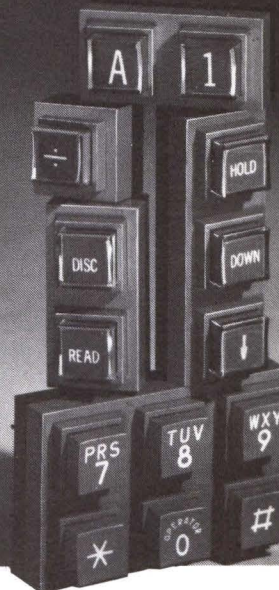
To use a library, the user loads the proper cartridge and activates the tape cartridge unit. As the routines are displayed on the screen, the user selects the individual routines he wishes to run, and the computer then prompts and guides him through to completion of the problem.

## Price and Delivery

All models of the 5100 Portable Computer are available only on a purchase basis. Prices range from \$8975 to \$19,975, depending on language and amount of memory desired. The model 5103 printer sells for \$3675, and the model 5106 auxiliary tape unit is \$2300. Each Problem Solver Library, consisting of two tape cartridges and a user's guide, is available for a 1-time monthly charge of \$500. All units are customer-installed. Maintenance is available on either contract or per call, time and material service. Delivery is three weeks ARO. International Business Machines Corp, General Systems Div, PO Box 2150, Atlanta, GA 30301. Tel: (404) 256-6799.

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