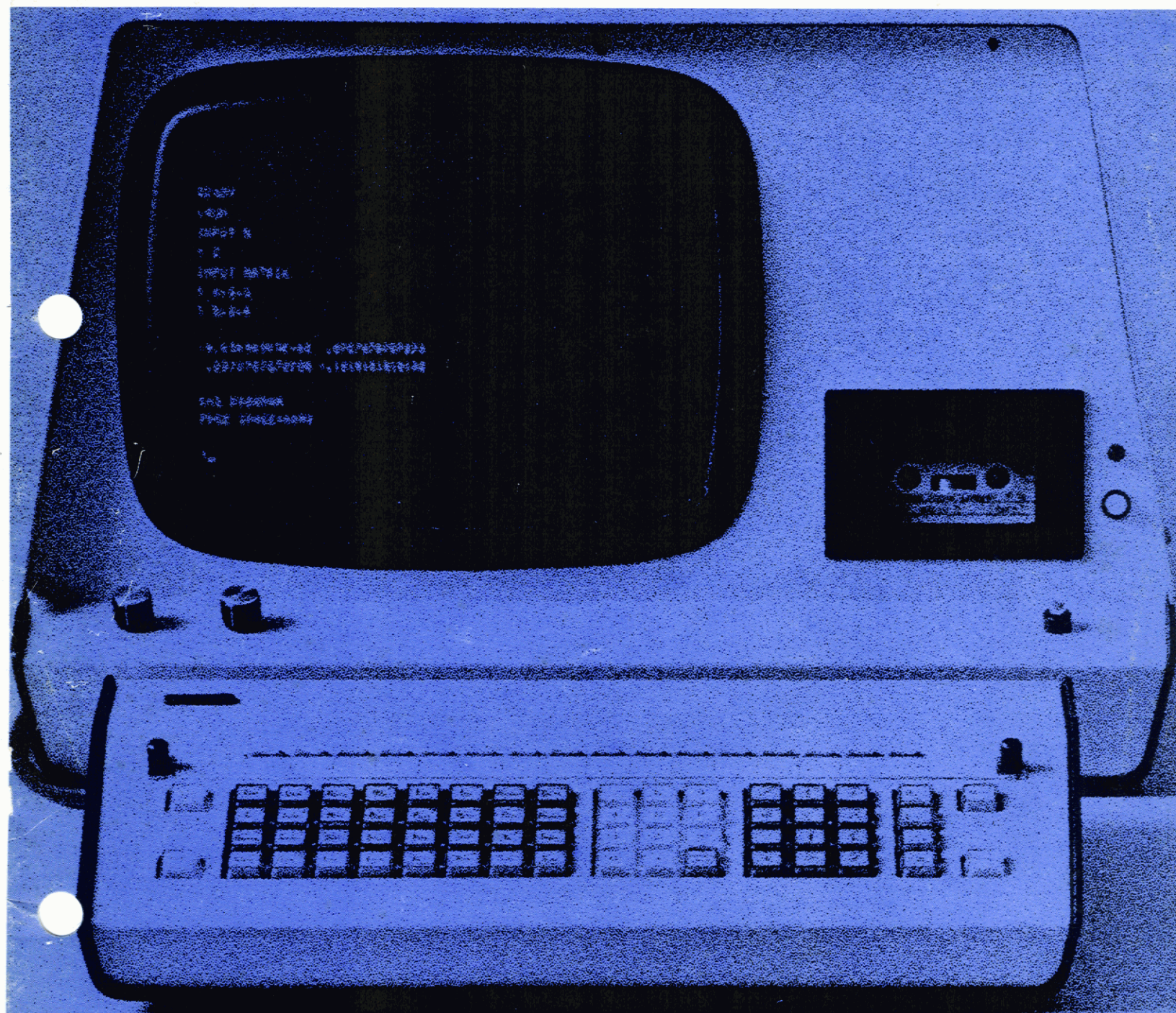


WANG

ORDERING
SPECIFICATIONS

SYSTEM 2200



2200

Ordering Specifications

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the most recent specifications
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SYSTEM 2200A CENTRAL PROCESSING UNIT (CPU)

A Keyboard Programmable Electronic Calculator with hardwired BASIC language. The Central Processing Unit (CPU) must have at least 4096 bytes of memory, expandable in 4096 byte increments to 32,588 bytes. The CPU must be capable of supporting any or all of a large number of peripheral devices: cathode ray tube display (16 lines x 64 characters per line); Selectric output typewriter; an input keyboard of either typewriter characters or single keystroke BASIC language verbs; an 80 or 132 column line printer; an 80 column thermal printer, magnetic tape cassette drives; and telecommunications between central processing units.

SYSTEM 2200B CENTRAL PROCESSING UNIT (CPU)

A Keyboard Programmable Electronic Calculator, with hardwired BASIC language. The Central Processing Unit (CPU) must have at least 4096 bytes of memory, expandable in 4096 increments to 32,588 bytes. The CPU must be capable of supporting any or all of a large number of peripheral devices: cathode ray tube display (16 lines x 64 characters per line), a Selectric output typewriter; plotters capable of either single point or continuous line; an input keyboard of either typewriter characters or single keystroke BASIC language verbs; an 80 or 132 column line printer; an 80 column thermal printer, a disk storage unit with capacity of 131,072 bytes or 262,144 bytes, or 1,228,000 bytes or 2,457,600 bytes, or 5,013,504 bytes of information; single or multiple magnetic tape cassette drives; Teletype interface; the capability of telecommunication between central processing units; a 300 card per minute card hopper-feed punched card reader (with option 2), and 8 bit and 10 digit parallel interface.

MODEL 2201 OUTPUT WRITER

A Modified IBM Selectric typewriter with a built-in interface to the WANG System 2200A or B to be used as an output device for that system. Typewriter must be capable of typing all alphanumeric characters, including upper and lowercase, fully formatted under program control, at a rate of 13 characters per second. Must be able to execute all formatting commands under WANG System 2200 program control which can be executed manually from the typewriter keyboard. The Output Writer must be compatible with other peripherals and output devices connected into the system. It must also be usable as a conventional typewriter.

MODEL 2202 PLOTTING OUTPUT WRITER

A modified IBM Selectric typewriter able to plot and print out alphanumeric data generated by the WANG System 2200B. Must type upper and lowercase at 13 characters per second. Must implement full format specifications, including BACKSPACE, CARRIAGE RETURN/LINE FEED, INDEX, REVERSE INDEX and PLOT. Plotting Output Writer must be compatible with other peripherals.

MODEL 2203 PUNCHED TAPE READER

An optical high-speed paper tape reader capable of loading data and program text from a punched tape into the WANG System 2200B. The unit must read data from punched tape at a rate of 300 characters per second, in a forward or reverse direction. The unit must be able to accommodate standard 5, 6 and 7 channel paper tape and codes as well as standard 8-channel tape punched in ASCII code.

MODEL 2207 I/O INTERFACE CONTROLLER (RS-232-C)

An I/O interface controller card for the WANG System 2200B that enables the attachment of a RS-232-C compatible device. The following performance is required: 110 baud asynchronous transmission rate and code format of (a) 1 start bit, 8 data bits, and 2 stop bits or (b) 1 start bit, 7 data bits plus parity bit and 2 stop bits.

MODEL 2212 ANALOG FLATBED PLOTTER (10" x 15")

An incremental, flatbed plotter compatible with the WANG System 2200B; must be capable of full alphanumeric plotting, labeling and scaling under program control. Must plot alphanumeric characters over a wide range of sizes and automatically RESET to a defined original position.

MODEL 2214 MARK SENSE CARD READER

A Mark Sense Card Reader for entering information into the WANG System 2200A or B must be able to read either marked or punched cards at a rate of .8 seconds per card. Each card must contain up to 40 columns, which may be either program text or data. The Card Reader must be able to read multiple consecutive cards containing data or programs in specified character codes and formats into the Wang System 2200A or 2200B and cards containing data in any format and character code into the Wang System 2200B.

MODEL 2215 BASIC KEYWORD KEYBOARD

An input keyboard compatible to WANG System 2200 and containing most of the BASIC language verbs and commands as single keystroke entries, e.g., DIM, FOR, NEXT, PRINT, TRACE, etc. The keyboard contains all the alphabetic characters and the following special characters: +, -, :, ;, ", #, \$, ', %, *, /, ↑, (,), <, >, =, semicolon, and period. A ten-key keyboard for entry of numerics, 0-9, and decimal point. Trig functions, arithmetic operators, and control keys are also standard on the keyboard; in addition to sixteen special function keys capable of accessing 32 user-defined operations.

MODEL 2216 CRT EXECUTIVE DISPLAY

A CRT capable of displaying 16 lines of 64 characters each at one time. The CRT is to be 10½ in. wide and 8 in. high. The CRT must be usable with a maximum display rate of 5000 char/sec.

MODEL 2217 SINGLE TAPE CASSETTE DRIVE

A tape cassette drive capable of storing and recalling data and programs for the WANG System 2200A or B. The tape drive must be able to drive a cassette holding 150 ft. of magnetic tape on which can be recorded a minimum of 78,300 bytes and transfer at a minimum rate of 326 bytes/sec including all gaps and redundant recording. Preformatted tapes must be used.

MODEL 2216/2217 COMBINED CRT EXECUTIVE DISPLAY/SINGLE TAPE CASSETTE DRIVE

A combined CRT capable of displaying 16 lines of 64 characters each at one time, and a cassette drive. The CRT is to be 10½ in. wide and 8 in. high, and must be usable with a maximum display rate of 5000 char/sec. The cassette drive is to be capable of storing and receiving data and program information for the WANG System 2200A or B. The tape drive must be able to drive a cassette holding 150 ft. of magnetic tape on which can be recorded 78,300 bytes and transfer at a rate of 326 bytes/sec including all gaps and redundant recording. Preformatted tapes must be used.

MODEL 2218 DUAL TAPE CASSETTE DRIVE

Two tape drives encased in a single unit capable of storing and receiving data and programs for the WANG System 2200A or B. These tape drives must be able to drive cassettes holding 150 ft. of magnetic tape on which can be recorded 78,300 bytes and transfer at a rate of 326 bytes/sec including all gaps and redundant recording. Preformatted tapes must be used.

MODEL 2219 I/O EXTENDED CHASSIS

A larger CPU chassis for the WANG System 2200 providing a total of 11 I/O peripheral connectors.

MODEL 2221 LINE PRINTER (132-column)

A high-speed 132-column printer providing complete, alphanumeric printing capability to the WANG System 2200A or B. Must print at a rate of 150 characters per second, using a matrix impact printing technique which can generate four carbon copies in addition to the original. Must print two selectable type sizes, composed either from a 5 by 7 dot matrix in normal size, or from a 10 by 7 dot matrix in

expanded size. Instructions must consist of a complete alphabetic and numeric character set, all printable under program control from the WANG System 2200A or B.

MODEL 2222 ALPHA-NUMERIC TYPEWRITER KEYBOARD

An input keyboard similar to a typewriter keyboard enabling the direct input of alpha-numeric instructions directly into the WANG System 2200B or B. Character set must include complete set of control instructions which, when entered directs the system to perform program operation control functions. The keyboard must also be usable as a data input terminal to the System 2200A or B.

MODEL 2227 TELECOMMUNICATIONS CONTROLLER

A telecommunications controller capable of transmitting/receiving ASCII coded information for the WANG System 2200A or B. The unit must be completely interfaced to the WANG System 2200 and capable of switch selectable transmission rates of 110, 150 or 300 baud (direct connection) over voice grade telephone rates of 110, 150 or 300 baud over voice grade telephone lines; and 600 or 1200 baud over direct connection. It must be able to send/receive data bytes asynchronously with 1 start bit; 5, 6, 7 or 8 data bits, 1 or 2 stop bits, and parity. It must contain selectable switches for parity, 1 or 2 stop bits, and 5, 6, 7 or 8 data bits. It must be able to send a break signal with a special key. It must have a RS-232-C plug and be compatible to a Bell 103A modem or equivalent.

MODEL 2230 FIXED/REMOVABLE DISK DRIVE

A fixed/removable disk drive unit capable of storing and recalling data for the WANG System 2200B. The unit must be self-contained and completely interfaced to the WANG System 2200B. Each of the two disks in the unit must have the capacity to store 614,400 bytes of information (other sizes available are 1,228,800 bytes or 2,506,752 bytes). Instructions must be available to transfer 256 bytes at a time between the disk and the System 2200B. One or more disk drives must be operable in the System 2200B, in conjunction with various other input and output peripheral devices.

MODEL 2231 LINE PRINTER (80-COLUMN)

A high-speed, 80-column printer providing complete alphanumeric printing capability to the WANG System 2200A or B. Must print at a rate of 100 characters per second, using a matrix impact printing technique which can generate four carbon copies in addition to the original. Must print two selectable type sizes, composed either from a 5 x 7 dot matrix in normal size, or from a 10 by 7 dot matrix in expanded size. Instructions must consist of a complete alphabetic and numeric character set, all printable under program control from the WANG System 2200A or B.

MODEL 2232 DIGITAL FLATBED PLOTTER (31" x 42")

A digital flatbed plotter compatible with the WANG System 2200B. It must be usable with vellum, mylar and linen paper; rapidograph, fiber tip and ballpoint pens with a plotting surface of 42 inches x 31 inches (approximately 107 cm x 79 cm).

MODEL 2234 HOPPER-FEED PUNCHED CARD READER

A hopper-feed punched card reader that has input directly compatible to the WANG System 2200B through an interconnecting cable with an appropriate connector. The photo electric card reader must be capable of reading 80 column punched cards at the rate of up to 300 cards per minute. Under program control the reader must read either 80 characters of Hollerith code or 160 characters of binary data. The card reader must also be capable of stacking 1000 cards (input and output).

MODEL 2240 DUAL REMOVABLE FLEXIBLE DISK DRIVE

A flexible disk drive consisting of two removable disk platter units capable of storing and recalling data and programs for the WANG System 2200B. The unit must be self-contained and completely interfaced to the WANG System 2200B. Each of the two platters in the unit must have the capacity to store 131,072 bytes of information (also available is 262,144). Instructions must be available to transfer 256 bytes at a time between the disk and the System 2200B. One or more disk drives must be operable in the System 2200B, in conjunction with various other input and output peripheral devices.

MODEL 2241 THERMAL PRINTER (80-COLUMN)

An 80-column thermal printer providing complete alphanumeric printing capability to the WANG System 2200A or B. Must print at a rate of 30 characters per second using heat sensitive paper. Instructions must consist of a complete alphabetic and numeric set, all printable under program control from the WANG System 2200A or B.

MODEL 2250 I/O INTERFACE CONTROLLER (8-BIT-PARALLEL)

An input/output interface controller providing for the direct transfer of data or program text from an external peripheral device into the WANG System 2200A or B or from the WANG System 2200A or B into an external peripheral device. The I/O interface must be capable of transferring 8-bit parallel information with TTL/DTL compatible logic at speeds of up to 10,000 8-bit characters per second, asynchronously.

MODEL 2252 INPUT INTERFACE CONTROLLER (BCD 10-DIGIT-PARALLEL)

An input interface controller capable of transferring numeric data from an external peripheral device into the WANG System 2200A or B. The interface must accept numeric data up to ten (10) digits in BCD 1,2,4,8 parallel format, including an input strobe of five (5) microseconds or greater. It also must be able to accept up to 40 bits of binary data.

2290 CPU/PERIPHERAL STAND

A stand capable of storing the CPU and power supply of the WANG System 2200A or B. The table top must be 30" x 30" at a height of 28½" from the floor, and the equipment storage area must be 23" x 10" x 24".

OPTION 1 MATRIX ROM

A programmed Read-Only-Memory for the WANG System 2200B that enables the access of fourteen matrix operations. These operations must include: matrix addition, set elements of matrix = 1, matrix equality, set matrix equal to the identity matrix, inverse of matrix, matrix multiplication, matrix subtraction, transpose of matrix, set elements of matrix = 0, matrix input, print elements of matrix, redimension of matrix, read elements of matrix, and scalar matrix multiplication.

OPTION 2 GENERAL I/O ROM

A programmed Read-Only-Memory input/output option for the WANG System 2200B which provides a flexible set of BASIC statements that enables data or program text to be output to or input from peripheral devices. The option to provide a parameterized set of BASIC I/O statements that allow efficient and flexible operation for certain standard WANG System 2200 peripherals and provide the ability to specify signal sequence parameters for a device within the statement syntax.

OPTION 3 CHARACTER EDIT ROM

A programmed Read-Only-Memory character edit option for the WANG System 2200B that enables characters to be inserted or deleted in text lines being entered into the System. Also available must be key operations to move the cursor on the CRT conveniently to the desired position.

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