

PRODUCT
DATA SHEET

The Model 2231W-3 Matrix Printer provides high quality printed output to the System 2200. The printer uses a nominal 7 x 8 dot matrix to print an ASCII set of 112 characters containing both uppercase and lowercase letters, numbers, and symbols, with rapid yet quiet operation. Printing at a rate of 120 characters per second, the Model 2231W-3 can generate output from 40 to 250 lines per minute, depending on line length. The printer has a 132-character buffer which receives a full line of data sent from the Central Processing Unit (CPU).

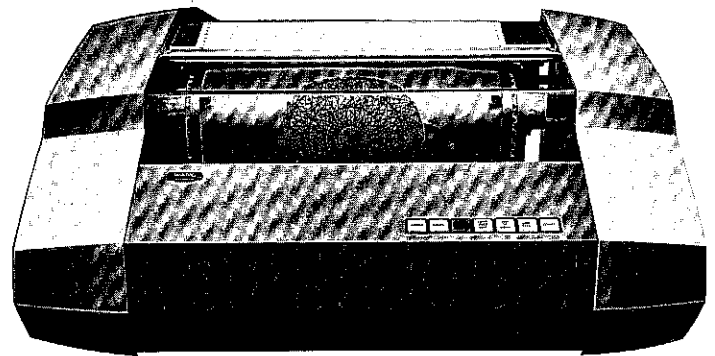
In addition to operating directly from the System 2200 CPU, the printer can be used with the Model 2282 Graphic Cathode Ray Tube (Graphic CRT). When attached to the Model 2282, the printer provides an accurate hard copy of the graphics information on the Graphic CRT. The hard copy is generated by printing strips of 800 x 8 dots on the paper until the image on the display is reproduced. Normal line feed spacing is reduced during image reproduction to provide vertical image continuity. The Model 2231W-3 also responds to normal print operations when attached to the Model 2282 Graphic CRT.

Standard features of the printer include a CLEAR (buffer) switch, a programmable alarm tone, manual line feed, vertical format control with punched tape loop, paper feed control with pin-feed units, front-loading of paper, and a SELECT/deSELECT switch to enable the printer to receive data from the System 2200. Under program control, the complete character set can be printed. Automatic formatting, which includes both horizontal and vertical tabs, is fully programmable to accommodate both preprinted and fixed-format output forms. Paper movement in the Model 2231W-3 is controlled by a two-channel vertical format tape. An expanded character size (where dots of each character in the symbol matrix are printed twice) can also be programmed to provide highlighted printing where desirable.

2200

MODEL 2231W-3 MATRIX PRINTER

- Graphic Image Copier
- Standalone Printer with 112 Character Set
- Expanded Print Capability
- 120 Characters Per Second



Character Set (normal and expanded print):

```

SsIiOoAaEeIiouAaEtAaO
SsIiOoAaEeIiouAaEtAaO
!"#$%&'()*+,-./
!"#$%&'()*+,-./
0123456789:;<=>?
0123456789:;<=>?
@ABCDEFGHIJKLMNO
@ABCDEFGHIJKLMNO
PQRSTUVWXYZ[ ]++
PQRSTUVWXYZ[ ]++
°abcdefghijklmnop
°abcdefghijklmnop
pqrstuvwxyzšžč
pqrstuvwxyzšžč
    
```



Wang Laboratories, Inc.

One Industrial Avenue, Lowell, MA 01851, Tel. (617) 459-5000, TWX 710-343-6769, Telex 94-7421

SPECIFICATIONS

Printer Size
 Height 10 in. (25 cm)
 Depth 18 in. (46 cm)
 Width 24 in. (61 cm)

Weight
 82 lb (36.9 kg)

Speed
 120 characters/second, 40 to 250 lines/minute

Character Configuration (Printing)
 7 x 8 dot matrix (dots not in adjacent columns of same row)
 Horizontal 14.4 chars/in. (5.7 chars/cm)
 Vertical 6.0 lines/in. (2.4 lines/cm)

Character Set
 ASCII 112 characters, both uppercase and lowercase

Line Width
 132 characters, normal printing (maximum)
 66 characters, expanded printing (maximum)

Graphic Image Reproduction Time
 105 seconds (maximum)

Image Reproduction Configuration
 800 (wide) x 8 (high) dots, continuous sweep

Ribbon
 Cartridge-ink ribbon, with Moebius loop

Controls/Indicators
 ON/OFF
 SELECT
 LINE FEED
 FORMS OVERRIDE
 TOP OF FORM
 CLEAR
 Power-on indicator
 Paper-out alarm and indicator
 Select indicator
 Alarm indicator

Programmable Control Codes

Audio alarm	[HEX(07)]
Line feed	[HEX(0A)]
Vertical tab	[HEX(0B)]
Form feed	[HEX(0C)]
Carriage return	[HEX(0D)]
Expanded print	[HEX(0E)]
Delete	[HEX(7F)]

Cable
 12-foot (3.66 m) cable with connector to the CPU

Controller
 Standard Line Printer Controller/CPU interface. When the printer is used with the Model 2282, the Graphic CRT plugs into the Printer Controller board in the CPU. The printer cable plugs into the output connector of the Model 2282.

Power Requirements
 115 or 230 VAC \pm 10%,
 50 or 60 Hz \pm 1.0 Hz
 145 Watts

Fuses
 AC line
 1.5 amp (SB) for 115 VAC
 0.8 amp (SB) for 230 VAC
 DC carriage motor
 2.5 amp (SB)

Operating Environment
 Temperature
 50° to 90° F (10° to 32° C)
 Relative Humidity
 35% to 65% noncondensing (recommended)
 20% to 80% noncondensing (allowable)

Heat Output
 600 Btu/hr (maximum)
Duty Cycle
 30% (based on an 8-hour, 5-day week)

Accessories
 Optional stand
Paper Specifications
 Maximum width 13.5 in. (34.3 cm)
 Minimum width 3.5 in. (8.9 cm)
 Normal form length 11.0 in. (27.9 cm)
 Material Margin-perforated fan-fold card or paper stock

Paper Stock
 Maximum number 4 copies plus original
 Single part forms 15 to 20 lb bond

Multipart forms
 2 ply 15/15 lb bond, 7 lb carbon
 3 ply 15/12/15 lb bond, 7 lb carbon
 4 ply 12/12/12/15 lb bond, 7 lb carbon
 5 ply 12/12/12/12/15 lb bond, 5 lb carbon

Fastening Multipart Forms
 For improved forms handling, use glued margins; otherwise fasten with crimps every 2 inches (5.1 cm) along both edges. Crimps must not come closer than 0.5 in. (1.3 cm) to the fanfold; each crimp must have four prongs, two to enter both form and carbon, and two to enter forms only.

Forms Thickness
 Maximum in print area: 0.018 in. (0.046 cm).
 Over crimps in margin: 0.030 in. (0.076 cm).
 When using forms with wide and narrow copies in the same set, the top copy should be the widest.

Sprocket Holes
 Must run along both margins 0.25 \pm 0.03 in. (0.0635 \pm 0.076 cm) from paper edge to hole center lines. Distance between hole centers must be 0.5 \pm 0.005 in. (1.27 \pm 0.0127 cm) nonaccumulative in any 5 in. (12.7 cm) length. Hole diameters must be 0.156 \pm 0.005 in. (0.396 \pm 0.0127 cm); the two top and bottom drive holes (four per sheet) can be up to 0.2 in. (0.51 cm) in diameter to permit post or ring binding of output. Distance between hole centers across the sheet must be uniform within 0.015 in. (0.038 cm) to a maximum of 12.31 in. (31.27 cm).
 When using preprinted forms, the pinhole center in left margin cannot be less than 0.375 \pm 0.0625 in. (0.95 \pm 0.16 cm); pinhole center in right margin cannot be less than 0.375 \pm 0.0625 in. (0.95 \pm 0.16 cm).

ORDERING SPECIFICATIONS

A matrix printer providing complete alphanumeric printing capability to any Wang System 2200. It must interface with the Model 2282 Graphic CRT to provide a hard copy of the graphic image on the screen. Using a 7 x 8 dot matrix printing technique, it must print at a rate of 120 characters per second (up to 250 lines per minute). It must print an ASCII 112 character set with both uppercase and lowercase letters in 14.4 pitch and expanded sizes. All printable characters must be fully programmable; the printer must print a 132 character line, have a full-line buffer, and react to ASCII control codes.

Standard Warranty Applies

Wang Laboratories reserves the right to change specifications without prior notice.



Wang Laboratories, Inc.

One Industrial Avenue, Lowell, MA 01851, Tel. (617) 459-5000, TWX 710-343-6769, Telex 94-7421 Printed in U.S.A.

This document was set on the Wang System 48 Typesetter.

700-4375C
 1-81-15M