INDUSTRIAL DATA PROCESSING SYSTEMS

Line printers PC 1606 and PC 1608



Low Cost

300 lines per minute (PC 1606)

600 lines per minute (PC 1608)

Simple

Reliable

Minimum acoustic noise

The modules PC 1606 and PC 1608 provide for high quality medium speed impact printing and is ideally suited for small computer systems and terminals. The print rate of 300 or 600 lines per minute is attained when printing a full 64 character set in a 136 column format. The printers produce clear, crisp straight printout on single thru 6-part forms.

All mechanical parts and electronics, including control logic and buffering are included to be connected to the lineprinter interface available on P 800 series minicomputers.

Operator controls have been designed for easy recognition and operation. A fault indicator panel provides rapid identification of operator correctable problems. The drum gate swings open to allow ready access for forms loading and ribbon changing. The enclosure has been designed to minimize acoustic noise.

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Reliability and maintainability are the heart of the PC 1606 and PC 1608 design. The unique Data Products Mark IV print hammer combines with a clutchless paper feed and voice coil hammer bank positioner to provide highly reliable elements in the printer system.
The electronics and major subassemblies are of modular construction to aid in rapid fault isolation and repair. Preventive maintenance requirements are minimal due to the inherent stability of the printer subsystems.

Modules PC 1606 and PC 1608 operating principles

The operating principles of both line printers are straightforward. Paper and inkted ribbon pass between a row of print hammers and a rotating drum, the surface of which contains all the print characters. Data to be printed is received and stored in a full line buffer. Printing is accomplished by scanning the stored data in synchronization with the rotating drum characters. The appropriate hammers are fired as the characters move into position opposite the print hammer. For the PC 1606 the hammer bank is mounted on flex pivots and is positioned alternatively between odd and even columns by a voice coil positioner. Odd columns are printed during one drum revolution, the even columns on another. Thus, a 300 lines per minute print rate is achieved for a 136 column print line with a single line advance.
The PC 1608 does not have the positioning of the hammer bank between odd and even columns. It has a fully equiped hammer bank for 136 columns resulting in a 600 lines per minute printing speed.

Specifications

Print rate
300 lines per minute PC 1606 using all 64 characters
600 lines per minute PC 1608 using all 64 characters

Character format
136 characters/line (10 char/in)

Character drum
64 characters

Character set and font
Modified ASCII 0.095″ high by 0.065″ wide

Operator controls
Push buttons: On/off line, Paper step, Top of Form, Alarm/Clear
Lamps: Ready, Power on
Fault indicators: Gate, Paper, Ribbon, Hammer, Format, Tape
Other: Phasing 6/8 lines per inch, Forms Reset

Paper feed
Single set of pin feed tractors, clutchless drive system
Single line advance: 50 milliseconds
Slew speed: 20 inches/second
Line spacing: 6 or 8 lines/inch (switch selectable)

Vertical format unit
12 channel VFU utilizes IBM compatible carriage tape
Provide step count control for 0 - 15 lines

Paper receptacle
A free standing basket used to collect paper after it leaves the printer

Self test
A code generator used to drive the printer independent of the user systems

Elapsed time meter
Used to record On line time

Paper dimensions
Standard fan fold, edge-punched continuous forms 4 to 16.75 inches wide

Paper type
Single copy, 15 lb. bond minimum multi-copy, to 6-parts with 12 lb bond and 7 lb. carbon

Format
Top of form control, single line advance and perforation step over

Interface signals
Input: 7 Data lines, 1 strobe line
Output: 1 Ready line, 1 Demand line, 1 On-Line line

Electronics
Full line buffer, TTL/DTL I/0 circuitry, power supplies and control logic included

Weight
340 lbs

Dimensions
45″ high x 33″ wide x 22″ deep

Power (single phase)
525 Watts, 115 or 220 or 240 ± 10 % 50 or 60 Hz ± 2 %

Environment
Operating: 10 to 32° Celsius
30 to 80 % Relative Humidity (excluding condensation)
Non operating: –18 to 66° Celsius
5 to 95 % Relative Humidity (excluding condensation)

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