

# PRODUCT SPECIFICATION

**Monarch®  
9820® Printer**

## STANDARD FEATURES

**Dimensions:** Height 12.5" (318mm)  
Width 12.0" (305 mm)  
Depth 13.0" (330 mm)  
Weight 25 lbs. (11 kg)  
Shipping Weight 29 lbs. (13 kg)

**Printhead:** 4.0" (102 mm/812 dots)  
203 dots/inch (8.0 dots/mm)

**PC/Host Interface:** Asynchronous RS-232C  
None, XON/XOFF, CTS, or DTR flow control  
1200, 2400, 4800, 9600, 19200, or 38400 Baud  
ASCII Data transmission code  
IEEE-1284 Parallel

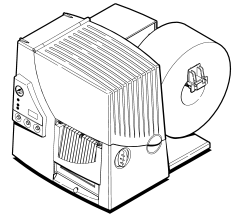
**Buffers Available (1280K Total):** Transmit, Receive, Image, Internal, Format, Downloadable Fonts, Scalable Fonts.

**Standard Fonts:** Standard, Reduced, Bold, OCRA-like, CG Triumvirate, CG Triumvirate Bold

**Font Magnification:** 1x to 7x

**Print Ratio:** 30% black maximum per square inch

TABLETOP PRINTER  
THERMAL DIRECT OR TRANSFER  
OPERATES ONLINE  
PRODUCES 4" X 12" IMAGES



## Standard Bar Code Symbolologies:

This printer also prints high-density bar codes and bar codes in the serial direction.

Barcode Type	Narrow to Wide Ratio	%Density or CPI	Narrow Element (dots/mils)	Data Length
UPCA +2/+5	1:1.0	76%, 114%	2/9.9, 3/14.8	11 or 12, 14/17
UPCE +2/+5	1:1.0	76%, 114%	2/9.9, 3/14.8	6 or 7, 9/12
EAN8 +2/+5	1:1.0	76%, 114%	2/9.9, 3/14.8	7 or 8, 10/13
EAN13 +2/+5	1:1.0	76%, 114%	2/9.9, 3/14.8	12 or 13, 15/18
Interleaved 2 of 5	1:30	1.1, 3.2, 5.6, 7.5, 11.0, 11.2	21/103.4, 7/34.5, 4/19.7, 3/14.8, 2/9.9, 2/9.9	0 to 2710
	1:2.5	2.1, 4.2, 6.3, 12.7	12/59.1, 6/ 29.6, 4/19.7, 2/9.9	
	1:2.3	8.8	3/14.8	
	1:2.0	9.6, 14.5	3/14.8, 2/9.9	
Extended Code 39	1:30	4.2, 6.3, 12.7*	3/14.8, 2/9.9, 1/4.9	0 to 2710
	1:2.5	1.4, 1.7, 3.5, 7.0	10/49.3, 8/39.4, 4/19.7, 2/9.9	
	1:2.2	3.0	5/24.6	
	1:2.0	3.9	4/19.7	
Codabar (NW7)	1:3.0	2.1, 8.4	8/39.4, 2/9.9	0 to 2710
	1:2.5	3.0, 4.6, 9.2	6/29.6, 4/19.7, 2/9.9	
	1:2.0	5.1, 10.1	4/19.7, 2/9.9	
Code 128	1:1.0	3.7/7.4, 4.6/9.2, 6.1/12.3, 9.2/18.4	5/24.6, 4/19.7, 3/14.8, 2/9.9	0 to 2710
Code 93	N/A	3.7	6/29.6	0 to 2710
		4.5	5/24.6	
		5.6	4/19.7	
		7.5	3/14.8	
		11.2	2/9.9	
MSI	1:2.5	7.2	2/9.9	0 to 2710
	1:2.0	4.2, 5.6	4/19.7, 3/14.8	

\* Parallel bar codes only for special application. Code 39, density 12, produces a one-dot narrow bar. This density is intended for special U.S.P.S. ACT-tag applications only.

**Monarch®  
PAXAR**

**In our ongoing effort to deliver the best technology, specifications are subject to change without notice. A copy of the applicable written Monarch warranty statement is available upon request.**

Barcode Type	Aspect Ratio	Security Level	Element Width (dots/mils)	Row Height (dots/mils)	Data Length
PDF417	1:1.0	0-8	2/9.8.3.14.8, 4/19.7	2/9.8.3.14.8, 4/19.7	0 to 2709
	1:2.0		2/9.8.3.14.8, 4/19.7	4/19.7, 6/29.6, 8/39.4	
	1:3.0		2/9.8.3.14.8, 4/19.7	6/29.6, 9/44.3, 12/59.1	

Barcode Type	Data Length	Density Selector	Element Width (dots/mils)	Row Height (dots/mils)	Short Element (dots/mils)
Postnet	0, 5, 6, 9, 11	0 (fixed at 4.3 cpi)	4/19.7 (5 dot gap)	24/118.2	10/49.3
Maxicode	99	7	N/A	N/A	N/A

## SUPPLIES

Only Monarch® supplies are recommended; use thermal direct or thermal transfer with ribbon. Die cut or black mark supplies are available. For high-density and serial bar codes, Monarch "premium" supplies are recommended.

**Supply Sizes:** Widths - 1.2" to 4.0"  
(31 mm to 102 mm)  
Lengths - 0.5" to 12.0"  
(13 mm to 305 mm)  
Supply roll length is 7,872"  
(200 meters).

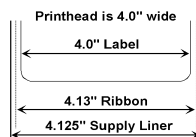
**Maximum Print Area:** 4.0" x 12.0" (102 mm x 305 mm)

**Ribbon Widths:** 1.3" (33 mm), 1.6" (41 mm),  
2.16" (55 mm), 3.15" (80 mm),  
4.13" (105 mm)

Ribbon roll length is 23, 616"  
(600 meters.)

## ABOUT RIBBONS

The width of the ribbon must be greater than the supply width. Since some supplies are more abrasive to printheads than others, using a ribbon wider than your supply helps protect the printhead. Replacement printheads are expensive.



## ENVIRONMENT RANGES

**Temperature:** Operating Thermal Transfer  
40° to 95° F (4° to 35° C)

Operating Thermal Direct  
40° to 104° F (4° to 40° C)

Storage 15° to 120° F  
(-10° to 49° C)

**Humidity:** Operating and Storage 5% to 90% non-condensing

## Electrostatic Discharge and Air Quality:

Some problems with electronic equipment may occur in environments prone to static discharge or extreme dust conditions. Monarch suggests that you take precautions to minimize these problems.

## PERFORMANCE

**Power:** U.S. - 115 V/60Hz, 250 Watts nominal  
International - 230 V/50 Hz or 100V/50 Hz

**Printing Rate:** 2.5" (64 mm) per second  
(default for serial bar codes)  
4.0" (102 mm) per second  
6.0" (152 mm) per second  
(default for parallel bar codes)

Serial bar codes printed at speeds greater than 2.5 inches per second may not scan properly.

**Printer Warranty:** One (1) year parts and one (1) year labor

**Printhead Warranty:** One million inches or six months, whichever occurs first.

## OPTIONS

- ◆ Internal Coax/TwinAx Protocol (Part#117532)
- ◆ LAN Print Server - Supports Ethernet, AppleTalk, IPX, NetBios/NetBEUI, TCP/IP. RJ-45 Connector (10 Base T, Part#11753101) or BNC Connector (10 Base 2, Part#11753102)
- ◆ Printhead Assembly Kit (Part# 11797101, 03, 06; available as 1, 3, or 6 printheads)
- ◆ Ribbon Take-Up Core (Part # 11796120, 30, or 40; available in 2", 3", or 4" widths)