P7000

LINE MATRIX PLATFORM
leadership by design

Authorized Dealer:

DATAcap, Inc.
1-800-795-5431
www.datacap-inc.com

PRINTRONIX®
GLOBAL PRINTING...ENABLED.

PRINTRONIX®
LINE MATRIX PLATFORM
leadership by design

Printronix has been the global leader in industrial printing solutions for over 30 years, earning a reputation for designing and manufacturing leading edge products and delivering them to market with unsurpassed service and support.

The Printronix P7000™ Line Matrix Printing Platform extends the series of technology innovations that cement Printronix *leadership by design* position. Line matrix printing is Printronix flagship technology, and it remains the workhorse solution for supply-chain and back-office printing applications because of its reliability, lower cost of ownership and flexibility of printing applications.

SCALABLE • INNOVATIVE • BEST OF BREED • BUILT FOR CHANGE

SCALABLE
Designed to meet your printing demands today and adapt to match your future printing requirements. Your investment will be protected with Printronix upgrades to support emerging standards and innovations.

INNOVATIVE
Printronix invented line matrix printing and maintains a reputation as a technology leader in the printing industry, with innovative solutions to real-world challenges.
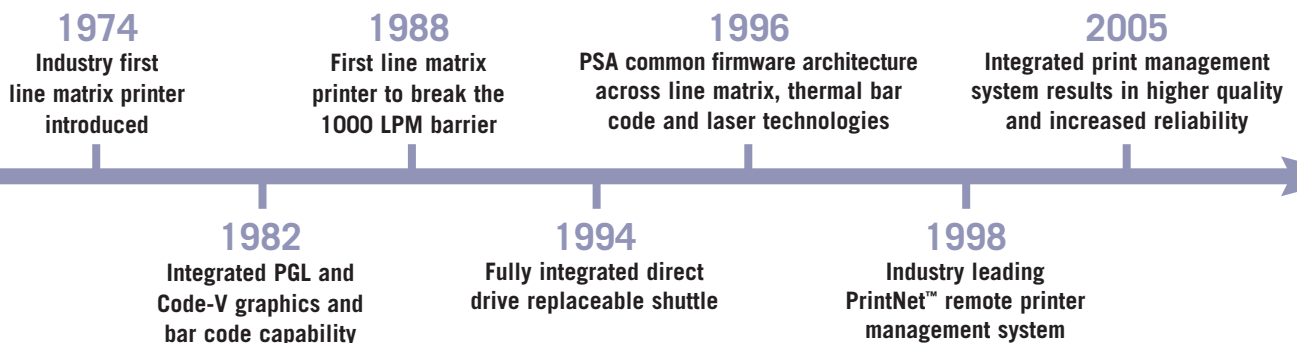
BEST OF BREED
Printronix line matrix printers set the standard in the industry. The P7000 line matrix platform features the lowest service cost, least expensive cost per printed page, easiest user experience and longest-lasting ribbon available.

BUILT FOR CHANGE
By design, this framework has produced the best line matrix printer in Printronix history. The P7000 platform is even more reliable, and is future-proof. Because of its scalability, the P7000 could be the longest-lasting printer any organization will ever own.

Printronix pioneers three decades of leadership by design

1974
Industry first line matrix printer introduced

1988
First line matrix printer to break the 1000 LPM barrier

1996
PSA common firmware architecture across line matrix, thermal bar code and laser technologies

2005
Integrated print management system results in higher quality and increased reliability

1982
Integrated PGL and Code-V graphics and bar code capability

1994
Fully integrated direct drive replaceable shuttle

1998
Industry leading PrintNet™ remote printer management system
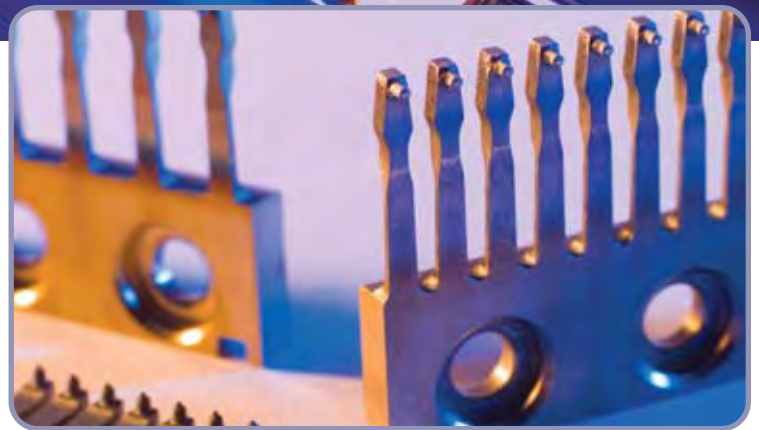
RUGGED, COST EFFECTIVE AND VERSATILE

The P7000 offers unsurpassed reliability. When your application cannot be interrupted, look to the P7000 for maximum productivity.

For cost control, this technology provides the edge needed, giving you the lowest cost per page output.

It handles specialized forms that work for your application – forms that can only be printed on a line matrix printer – information reports, multi-part transaction documents and bar code labels.

P7000 FAMILY INTRODUCES

- **Enhanced reliability –** provides more up time and lower operating costs

- **Ultra capacity ribbons –** delivers darker image, lasts longer, and costs less

- **Integrated print management system –** provides precise control over print quality, print costs, and job planning

- **Redesigned pedestal –** improves user access and forms handling flexibility

- **Increased ease of use –** simplifies operation and enhances productivity

ENHANCED RELIABILITY

No other print technology delivers more trouble free high volume printing than a Printronix line matrix printer. Every generation of our printers has delivered higher quality and more reliability than its predecessor. Now the P7000 Series, with a wide range of design enhancements, carries the tradition forward delivering the most reliable Printronix printer ever. The result is more uptime, more mission critical dependability and lower service and operating costs.

P7000

P5000

Special formulation and larger capacity spool delivers higher performance and lower cost

Plan print jobs with precise ribbon life indicated on panel

ULTRA CAPACITY RIBBONS*

Leadership by design also extends to our consumables. Customers turn to line matrix to get the lowest cost printing of any technology. Typically *10 times less expensive than laser or serial matrix*, Printronix line matrix delivers significant cost savings in all high volume applications. To extend this benefit even further, Printronix has made significant investments in the design and testing of new fabrics, ink formulations, and ribbon construction. The highlight of these investments is a breakthrough ribbon that is at the heart of the P7000 family. Suitable for both text and bar code applications, the P7000 Ultra Capacity ribbon starts 20% darker and lasts *3X longer* than our most popular 30 million character ribbons. With a 90 million character rated life, the number of user interventions are dramatically reduced. In addition to the labor savings from reduced consumable handling, the efficiency of this design results in an even *lower cost per page*.

INTEGRATED PRINT MANAGEMENT SYSTEM

This system is designed to constantly monitor print quality - eliminating waste, maximizing ribbon life and reducing printing costs. Printronix has built in the intelligence and auto-sensing capabilities that provide visibility and control without any user set-up.

This allows the system administrator to have precise control over print quality, consumable costs, and job planning. Add in PrintNet® Enterprise and the visibility and control, along with instant e-mail alerts, comes right to your desktop - ideal for enterprise management of printing applications.

* Patent Pending

IMPROVED PEDESTAL DESIGN

The pedestal model has been completely redesigned for the P7000 Series.

- The clamshell design allows easy access to all controls, providing faster ribbon replacements and easier paper loading

- Interior room has been expanded to accommodate the P7000 Ultra Capacity ribbons, creating a 3X increase in ribbon capacity over previous pedestal models

- Standard oversized casters make movement easier than ever

- Versatility has also been enhanced with the ability for the paper path to be configured for either top or rear exit

- Using the top paper exit along with newly refined eject key functionality this printer is ideal for short print runs and easy access to output

Rear feed

Top feed

Easy access clamshell design

ENCLOSED CABINET

The enclosed cabinet models provide for near silent operation, making these printers perfectly suitable for use in the quietest of office environments. In addition, these models provide the best paper handling for large print runs. All input paper is sealed inside and protected from bumping and contamination. Even more importantly, an elegantly simple, but highly effective combination of moveable fences and chains allows for neat stacking all the way up to a full box of paper. For tougher forms that tend not to refold well, a SureStak power stacker option is available for the enclosed cabinet models. With this option, even the toughest forms can be printed and stacked neatly up to a full box. So, in either configuration, the enclosed cabinet models are your best choice for large unattended production printing applications.

Enclosed cabinet design

INCREASED EASE OF USE

In creating the next generation of line printers, customer feedback was used to identify enhancements that would simplify operation, enhance the user experience and boost productivity.

- The ribbon spool and hub have been redesigned to be fully self aligning and to snap on and off with ease

- All user adjustment and control points are blue for fast operator identification

- The control panel is color coded, with faster reacting keys

- A Quick Setup menu simplifies and groups the most common setup parameters into one easily modified section

- Automatic configuration saving prevents settings from accidentally being lost or reset

- The platen gap adjustment system has been redesigned to separate the functions of opening/closing the platen and setting the gap. The gap is now set by a knob to match the form's characteristics, and once set, the platen can be opened and closed without affecting the gap setting, simplifying the loading of ribbons and forms

Platen adjustment feature

ASSET PROTECTION

Today's IT environment is changing faster than ever and it is impossible to tell what is going to be required of your IT assets in the future. This is why a new PSA®3 controller with expanded memory and capabilities was developed especially for the P7000. Just as the P5000 was able to grow with a changing IT environment for nine fast-paced years, the P7000's new PSA3 controller provides all the base foundation and necessary room to grow with the next generation of changes. So, whether your needs evolve to new data streams or expanded wireless options, your investment will be protected with the P7000.

CONNECTIVITY AND COMPATIBILITY

The P7000 provides the most connectivity and emulation options available on any impact printer. Mix and match between wired Ethernet, wireless Ethernet, parallel, serial, Coax and Twinax. Couple this flexibility with automatic port switching and you can easily connect your new line matrix printer to multiple systems. Often this is an ideal solution for environments migrating between hosts. Available emulations include P-Series, PGL, VGL (Code-V), DEC LG, PCL 2, ANSI, IPDS, CT, and the most common serial matrix languages. What is most important about all of these emulations and connectivity options is seamless compatibility. By design and through rigorous testing, the P7000 is able to seamlessly replace any previous Printronix line matrix printer and virtually any competing legacy impact product.

FLEXIBLE AND ADAPTABLE

Understanding that often a simple modification to the application is just not possible, all P7000 printers come standard with the ability to intercept and modify a data stream before printing. Any changes can be corrected or modified to create the desired output without any costly host application modification.

ETHERNET WITH JOB CONTROL

There is a large installed base of coax and twinax connected line printers. Traditionally, migrating away from Twinax or coax to Ethernet eliminated the costly and inflexible infrastructure, but also eliminated the valuable job control. Now, with TN3270, TN5250, or the latest IPDS, the choice between cost/flexibility and control is eliminated. Using these new options, you can migrate to Ethernet printing and still maintain all the job control these mission critical applications require.

PRINTNET ENTERPRISE

Successful organizations are flexible enough to meet new requirements in a changing marketplace. PrintNet Enterprise provides this flexibility by placing total control of worldwide print operations in your IT network manager's hands. By combining a fully integrated Ethernet adapter and Java-based remote management software, this remote printer management tool provides:

- **Increased IT resource efficiency –** Centrally manage, organize and control Printronix printers remotely on a LAN/WAN and remotely control, configure, manage and monitor printers over the network

- **Reduced downtime costs –** Maximize printer uptime by instant response to printer issues from email, pager or cell phone alerts

- **Maximized security –** Utilize PrintNet Enterprise remote front panel emulation to change, secure and protect printer configurations by locking out unauthorized users

- **Complete compatibility –** Designed for upward compatibility to support and manage the entire Printronix family of future printers in a fast expanding network. These printers are fully compatible with existing Printronix line matrix, thermal bar code and fanfold printing solutions that frequently operate in the same enterprise network.

Push tractor system eliminates forms loss

P7000ZT SERIES

The P7000ZT Series incorporates the industry leading features of the P7000 pedestal model printers - clamshell design, Ultra Capacity consumables and Integrated Print Management. Unique to the P7000ZT Series is the special push tractor configuration. **This system enables you to print from the very first to the very last line of a form and then tear it off with no loss of forms.**

This series is ideal for applications requiring precise accounting of all forms or where forms are simply too expensive to waste. Especially, when each form is torn off and used individually, the elimination of waste between sheets can yield significant savings.

The smart paper system automatically ejects the paper for tear off after the page or job is printed, and then retracts it as soon as the next job is sent. Or, at any time, you can use the Eject key to present or return forms as necessary for tear off.

COST SAVINGS AND RELIABILITY

Often, lighter duty dot matrix printers are used for applications requiring zero form loss impact printing. However, as print volume and mission criticality increases, the economic viability of these printers rapidly diminish. In contrast, the P7000ZT Series, using the Ultra Capacity ribbon, typically delivers a 10X consumable cost advantage over dot matrix. More importantly, the robustness of P7000ZT sixth generation line matrix technology helps avoid the highest cost of all in mission critical printing– lost production due to downtime. This combination of high reliability and low operating cost makes these printers the ideal solution for demanding production applications.

P7000ZT

PAPER HANDLING EASE

The smart paper system automatically ejects the paper for tear off after the page or job is printed, and then retracts it as soon as the next job is sent. Or, at any time, you can use the Eject key to present or return forms as necessary for tear off.

HIGH DEFINITION PRINTING WITH P7000HD SERIES

The cost savings, reliability and forms flexibility offered by Printronix line matrix printers continue to make this the best technology option for many critical print applications. The P7000HD Series extends the reach of applications that can benefit from this technology even further. As existing line matrix applications are migrated to new systems or new applications are developed, the traditional method of hard coding applications for a specific printer is diminishing. Instead, programmers are leveraging more general purpose Windows based tools that take advantage of a virtually limitless array of font styles, sizes and graphics, while avoiding any printer specific coding. The P7000HD provides all the necessary print resolution and system capability to drop straight into these typical laser environments without any application modifications or special accommodations.

PRINT CAPABILITIES

These printers offer such high definition that items such as proportional spacing, complex fonts, logos, PDFs and super small point sizes look just as they are designed and intended at a fraction of the cost of laser. Using the P7000HD high performance Windows drivers, the application programmer designs the output to match their requirements without needing to worry about any limitations of the printer.

PRINT MECHANISM

The nominal print density for these printers is 180x180 dots per inch (DPI). Alternately, 120x120 and 90x180 DPI modes are available when image detail can be traded for speed. The printers incorporate special fine tip technology to produce much smaller dots than the standard P7000. All of this is driven by the P7000's PSA3 controller, which provides the necessary power to drive these complex graphics at full speed. The result is the sharpest highest quality image ever produced by Printronix.

High definition shuttle design

Sharp image quality

ULTRA CAPACITY HD RIBBONS

A special High Definition formulation of Ultra Capacity ribbon was developed for the P7000HD Series to handle the unique challenges of high detail fine point printing. Like the standard Ultra Capacity ribbon, this new formulation delivers a sharper, darker image for a greatly extended life. The result is reduced user intervention, improved print quality and the best cost per page. And, like all P7000 ribbons, they are fully supported by the Integrated Print Management system.

P7000 OPTIONS

A wide variety of paper handling options are available for the P7000 to help maximize performance in all applications.

- **Front Tray –** For applications that demand mobility, a front paper shelf allows the source paper to move with the printer. Also, raising the paper off the floor helps protect the media from damage. This shelf is strong enough and low enough to support a full box of paper.

- **Low Rear Tray –** This output tray is ideal for large print runs. An adjustable back bar keeps the paper aligned and neat even when stacking large quantities.

- **High Rear Tray –** This tray is ideal for applications where the printer is placed up against a wall and output stacks are limited to short runs. Since the tray is located near the top of the printer, access from the front is easy.

- **Front Paper Access –** This innovative option allows you to load paper and retrieve output from the front of the printer. This dramatically reduces the space required by the printer, since the rear can now be pushed into a corner or up against the wall (a minimum clearance of 4" must remain for the top cover to open). The adjustable front shelf allows you to select the correct balance between size of source stack and size of stack that can be retrieved from the rear.

- **SureStak Power Stacker –** Some forms that do to not refold well or tend to fluff up during printing may not stack properly with the passive stacking aids found in the standard quiet cabinet models. For these applications, a SureStak power stacker option is available. This device actually pulls the printed paper over the top of the print path and pushes it down into the stacking area. There, a series of paddle wheels actually refold the forms tightly, so even the toughest forms can be printed and stacked neatly up to a full box.

- **Acoustic Shroud –** This assembly mutes the sound emanating from the paper exit slot to quiet the printer by a significant 4 dBA. This is an ideal solution for any pedestal printer operating near people trying to work. The shroud features a self-guiding paper path and easy tilt away design for ready access to the media.

- **Extended Forms Support –** Quiet cabinet models cannot be quiet if forms are too large to allow the doors to shut. To solve this problem, the P7000 can be equipped with optional extended doors. Kits are available with one or two extended doors to fit your application. A single extended door will support forms up to 14" in length. Two doors will allow up to 17" long forms to fit inside with all door closed.

LINE MATRIX PRINTERS

GENUINE PRINTRONIX RIBBONS – P7000

Ultra Capacity	Darkest longest lasting ribbon for bar code, OCR and text applications – 90 million character capacity
Label	For applications using shiny or coated label face stocks – 65 million character capacity

GENUINE PRINTRONIX RIBBONS – P7000HD SERIES

Ultra Capacity HD	Special formulation for dark long life printing of High Definition complex characters and graphics - 60 million character capacity

FORMS HANDLING – P7000 AND P7000HD SERIES

Type	Continuous, fan folded, edge-perforation
Paper Path	Straight through paper path with easy-load dual adjustable tractors
Feed	Bottom feed
Forms	Control 14 and 12 channel electronic vertical format unit, paper-out detector and alarm, paper motion detector and alarm
Print Width	13.6" (345mm)

MEDIA TYPES – P7000ZT AND P7000HDZT SERIES

Form Thickness	Maximum 100 lbs. up to 0.025" (0.64mm) Minimum as defined below	
Form Length	3" (76mm) to 12" (305mm)	
Form Width	6" minimum (maximum is a function of paper types)	
	12" maximum	17" maximum
Carbon Multipart	4 copies maximum	3 copies maximum
Carbonless Multipart	6 copies maximum	4 copies maximum
Single Part	18 lbs. minimum	20 lbs. minimum

Note: The forms guidelines above must be followed closely, these models push the paper and will not work if the form is very light weight or has other special features which make feeding difficult, if your form is questionable, it is best to send a sample to your dealer for review prior to purchasing a unit

MEDIA TYPES – P7000 AND P7000HD SERIES

Width	3" (76mm) to 17" (432mm)
Copies	P7000 - Up to 6 parts P7000HD – Up to 4 parts
Weight	15 to 100 lbs. up to 0.025" thickness 56 to 163 gm/mm up to .64mm thickness

MTBF

Hours at 25% duty cycle & 25% page density
P7000HD, P7200HD, P7000HDZT, P7220 – 8,000 hours
All other models – 10,000 hours

PRINTER FEATURES

Standard	Integrated print management automatic ribbon life monitor
Optional	SureStak on P7210, P7215 and P7220
Optional	Extended doors for 14" and 17" forms support
Optional	Black back forms paper out sensor
Optional	Slide out paper tray for easy loading and unloading
Optional	Cabinet front access/load/retrieval
Optional	Pedestal front paper tray
Optional	Pedestal high rear paper tray
Optional	Pedestal acoustic shroud

INTERFACES

Serial	RS-232 (RS-422 optional)
Parallel	IEEE-1284/Centronics (standard) Data Products (optional)
Ethernet	PrintNet Enterprise 10/100 Base T (optional)
Wireless	PrintNet Enterprise 802.11b (optional)
Twinax	Integrated Twinax interface for attachment to IBM Systems 36/38 and AS/400 directly or via IBM 5394 or 5494 workstation controller (optional – except P7000HD Series)
Coax	Integrated coax interface for attachment to IBM 3174, 3274, or 3276 cluster controller (optional – except P7000HD Series)
Auto Switching	Between active ports

P7000 SERIES

PRINTER MODELS	P7205	P7210	P7215	P7220
	P7005	P7010	P7015	
	P7005ZT	P7010ZT	P7015ZT	

Print Speed (LPM, upper case characters, lower case characters)

High Speed	500/428	1000/856	1500/1289	2000/1700
Data Processing	375/300	750/600	1125/900	1500/1200
Near Letter Quality	200/154	400/306	600/459	800/615

Graphics Speed (IPM)

60 x 48 dpi	63	125	187	250
60 x 72 dpi	42	83	127	167
90 x 96 dpi	21	42	61	83

Paper Feed Speed (IPS)	12	20	25	38.5

Character Pitch
(char. per inch)
10, 12, 13.3, 15, 17.1, 20 (except NLQ for 20 pitch)

Line Spacing
(lines per inch)
6, 8, 10.3, n/72, n/216

Graphics Resolution
180 dpi Horizontal, 144 dpi Vertical - (max)

Dot Size
16.7 mil (.42mm)

Emulations Standard
Printronix P-Series, P Series XQ, Serial Matrix, IBM ProPrinter III XL, Epson FX-1050

Emulations Optional
PGL/VGL, ANSI 3.64, IPDS (Twinax and Ethernet), TN5250, TN3270, PCL 2, DEC LG, Twinax and Coax. Twinax - IBM 5225 Models 1, 2, 3, 4, IBM 4234 Model 2, 12, Printronix transparent mode available for special functions. Coax - IBM 3287 Models 1 and 2, IBM 4234 Model 1, Supported modes BSC, SCS/LU1, DSC, and DSE Printronix transparent mode available for special functions

Print Attributes
Bold, italic, double wide, double high, overstrike, underline, subscript and superscript

Resident Character Sets
Unicode UTF-8 and over 100 multinational sets including IBM World Trade, ECMA Latin 1, DEC Multinational, IBM Code Page 437 and 850, OCR A, OCR B

Fonts
NLQ Serif, NLQ Sans Serif, Data Processing, High Speed, OCR A, OCR B

Resident Bar Codes
30 resident symbologies, including Code 39, EAN 8/13, UPC A/E, Postnet, Royal Mail, Interleaved 2 of 5, and PDF 417

P7000HD SERIES

PRINTER MODELS	P7000HD
	P7000HDZT
	P7200HD

Print Speed

180 x 180	79 inches per minute*
120 x 120	165 inches per minute*
90 x 180	147 inches per minute*
90 x 120	200 inches per minute*
90 x 90	236 inches per minute*

* Specification is based on 25% vertical page density, meaning print image exists on 25% of the available vertical dot rows, if the vertical coverage is higher or lower, the speed will decrease or increase proportionately, the width of the image has no affect on print speed

Paper Feed Speed
32 inches per second

Graphics Resolution
180 x 180 dpi - maximum - default
90 x 90 dpi - minimum

Dot Size
11 mil (0.28 mm)

Print Attributes
Full graphics capability to accurately reproduce TrueType™ fonts down to 6 point, along with lines, logos, limited gray scale shading and bar codes

System Connectivity
Windows Drivers 95/98/NT/2000/XP
All printing is done via P7000HD high performance Windows drivers, this will allow for seamless printing of PDF documents and other popular Windows based WYSIWYG applications; in most cases, a P7000HD can be used in place of a typical Windows connected laser printer with no application modifications

---

The following specs are for both the P7000 Series and the P7000H Series

PRINTER SOFTWARE AND DRIVERS
Printronix PrintNet Enterprise remote management software
SAP Device Types
Windows 95/98/NT/2000/XP

POWER	P7205	P7210	P7215	P7220
	P7005	P7010	P7015	P7000HD
	P7005ZT	P7010ZT	P7015ZT	P7200HD
				P7000HDZT
Watts Typical	175	260	390	475
Line (+/- 10%)	Auto Ranging 100-120 VAC, 200-240 VAC, 50/60 Hz			
Compliance	Energy Star - Less than 28 watts (energy saving mode)			

DIMENSIONS	PEDESTAL	ZT
Height	36" (914mm)	42.5" (1080mm)
Width	26" (660mm)	26" (660mm)
Depth	21.2" (538mm)	21.2" (538mm)
Shipping Weight	170 lbs. (77.2kg)	176lbs. (79.8kg)

DIMENSIONS	CABINET	SURESTAK
Height	41" (1041mm)	41" (1041mm)
Width	27.0" (686mm)	27.0" (686mm)
Depth	29.0" (737mm)	33.75" (857mm)
Shipping Weight	275lbs. (124.8kg)	305lbs. (138.5kg)

ENVIRONMENTAL

Acoustic Noise - dBA (per ISO 7779)		
P7005 - 62	P7205ZT - 66	P7205 - 50
P7010 - 65	P7010ZT - 70	P7210 - 50
P7015 - 68	P7015ZT - 70	P7215 - 52
P7000HD - 68	P7000HDZT - 70	P7220 - 55
		P7200HD - 55

Operating Temperature
50° to 104° F
10° to 40° C

14600 Myford Road, Irvine, CA 92606
800-665-6210 • www.printronix.com

PRINTRONIX®
GLOBAL PRINTING...ENABLED.