



T5000r Thermal Printer



T5000r Thermal Printer with ODV



T5000r / SL5000r RFID Solutions



T5000r Mobile Printing System



Printronix T5000r Thermal Printer Series

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1. Printronix

Printronix printers are the heart of business operations.

Established over 30 years ago, Printronix is a leading provider of industrial and back-office enterprise printing solutions for customers the world over. The long-term market leader in line matrix printers, Printronix has earned an outstanding reputation for its full selection of RFID, thermal, and laser printing technologies and networking solutions, all supported by unsurpassed service.

No one understands the mission-critical printing needs of the distribution supply chain better than Printronix. Whether your applications require forms, smart labels, bar codes or advanced verification technologies, Printronix brings you solutions that integrate seamlessly into networks by delivering unequalled control, unsurpassed diagnostic capabilities and marked cost efficiencies. In short, Printronix turns printers into global enterprise solutions with exceptional advantages.

Do your current printers...

- * Streamline business processes?
- * Set industry standards for ease of use and durability?
- * Multiply global supply chain productivity?
- * Substantially improve ROI?
- * Promote consistency, versatility and efficiency on a global scale?

Printronix printers do!

2. Newbury Data



Newbury Data is the UK's leading manufacturer of industrial serial impact printers and thermal print/encode (Travel Ticket) printers.

Manufacturing printers since 1974, Newbury Data reputation for our own high quality and highly reliable printers has made us the number one partner of choice to distribute thermal printers for the worlds leading manufacturers such as Citizen, Printronix and Zebra.

30 years of printing expertise means Newbury Data has the skills and understanding of printer communication and programming. This allows Newbury Data to seamlessly integrate new printing solutions into existing systems without changes to the current data streams, a vital requirement when integrating current technologies such as Citizen and Zebra Mobile printers, Printronix and Zebra RFID Printer/Encoders and SAMSys Readers.

Newbury Data's expertise in impact and thermal printing solutions has allowed us to develop unique solutions to help customers migrate from legacy desktop or stand alone systems to Mobile, Wireless, RFID and fully automated solutions interfacing into the latest WMS and ERP systems. Complimenting our printing solutions, Newbury Data has become partners with Datalogic and Psion Teklogix to be able to deliver full data capture solutions including customer specific ERP Middleware or full WMS solutions, making Newbury Data one of the most sophisticated GS1 Auto ID solutions providers in the UK.

Newbury Data Status

Manufacturer:

UK's No:1 Manufacturer of **Newbury Data** Serial Impact Printers
UK: Manufacturer of **Newbury Data** Travel Ticket Printers

Distributor:

Europe's No:1 Distributor of **Citizen** Thermal Printers
UK's No: 1 Distributor of **Printronix** Industrial Printing Solutions
UK's No: 1 Distributor **RJS** Scanners/Verifiers

Value Added Reseller:

UK: Accredited Reseller for **Datalogic** Data Capture Terminals and Scanner
UK: Leading VAR for **Psion Teklogix** Data Capture Terminals and Scanner
UK: Approved Solution Provider for **SAMSys** RFID Readers
UK: Leading Value Added Reseller of **Televideo** Thin Client Terminals
UK: Business Partner for **Zebra** Thermal Printers

Approved Solution Provider:

UK: Alliance Member Solution Provider **GS1 Data Capture Solutions**
UK: Approved Solution Provider for **EPCglobal RFID Solutions**

3. T5000r Printer Series

The T5000r best-of-breed thermal bar code label printers provide unique value to enterprise users at the point of their supply chain printing needs. These rugged, reliable, thermal printers are built to last in any type of environment and enable easy bar code labeling of your products and goods.

T5000r thermal bar code printers, based on the world-class 5r Multi-Technology Platform, are web-enabled, industrial-grade thermal bar code label printers designed to operate in demanding manufacturing or distribution environments. Printronix bar code printers enable the rollout of bar code label printing throughout the supply chain with an open migration path to RFID.



5r Multi-Technology Platform - Leadership by Design

Benefits

- **SCALABLE**
Software upgradeable architecture assures support of the latest features
- **INNOVATIVE**
Widest range of emulations for easy consolidation of multiple printer brands
- **BEST-OF-BREED**
PowerPC controller and new high-performance 5r driver deliver industry-leading throughput
- **BUILT FOR CHANGE**
Snap-in print head allows operator to easily replace print heads and change from 203 dpi to 300 dpi printing
- **SMART READY**
RFID field upgradeable supports future RFID requirements

Additional Features

- Unique dual motor ribbon system eliminates clutch replacement and ribbon wrinkle
- Aluminum die-cast design dampens vibration and maintains precise printer alignment
- Ventless system operates in environments with airborne particulate matter without compromising performance
- Easy side-load, cleaning and maintenance
- Wireless/Ethernet option provides real-time data access and local printing flexibility
- The GPIO option offers unparalleled integration with third party equipment
- Greater ribbon capacity eliminates frequent attention and disruption to workflow
- ODV option offers a complete bar code/RFID compliant solution
- PrintNet Enterprise option provides total control of worldwide print operations remotely

Asset Protection

The Printronix T5000r thermal printers provide an upgrade path to RFID through a comprehensive upgrade kit solution compliant to today's standards and compatible for growth to expand to tomorrow's needs. Built on the 5r Multi-Technology Platform, the T5000r offers a foundation for protocol upgradeability and expansion through firmware upgrades. Available upgrades include global frequency kits and RFID upgrade kits for multi-protocol EPCglobal Class 0, 0+, 1, Philips 1.19 and future EPCglobal 1 Gen 2. The T5000r eliminates service calls with field installable snap-in print heads that allow easy resolution change and the most extensive list of options such as ODV, guaranteeing 100% good bar codes every time.

4. T5r Model Chart

Model	T5204 ^r /T5304 ^r	T5204 ^r /T5304 ^r Direct Thermal	T5206 ^r /T5306 ^r	T5208 ^r /T5308 ^r
Technology	Thermal Transfer / Direct Thermal	Direct Thermal only	Thermal Transfer / Direct Thermal	Thermal Transfer / Direct Thermal
Processor	32-bit PowerPC 166-MHz			
Memory	32MB DRAM, 8MB Flash			
Print Width (max)	4.1"	4.1"	6.6"	8.5"
Speed (max)	10/8 IPS	10/8 IPS	10/8 IPS	8/6 IPS
Resolution (dpi)	203/300			
Connectivity (Std)	Serial, Parallel, USB			
Connectivity (Opt)	Coax, Twinax, PrintNet 10/100 Base-T, PrintNet Wireless NIC, PrintNet Dual NIC Kit, GPIO, RS422			
Interpreter	Zebra, TEC, Intermec, SATO			
Options	ODV (Online Validator), Rewinder, Cutter with Tray Kit, Real Time Clock			

5. T5r Factory Installed Options

T5r Options	
Emulations	
Standard Emulation Set	PGL, VGL, ZGL*, TGL*, IGL*, STGL* emulations
IPDS Emulation Set	IPDS with Standard Emulation Set
3270/5250 Emulation Set	Telnet 3270/5250 protocol Standard Emulation Set
Options	
16 MB Flash	16Mb Flash SIMM
PrintNet 10/100 Base-T Network Card	Ethernet PCI PCBA
PrintNet Wireless NIC **	Support for Cisco AIR - 352 radio and Symbol LA4121 S24 802.11b radio
PrintNet Wireless NIC **	Support for Lucent/Proxim Orinoco Gold/Silver radio
PrintNet Dual NIC Kit **	Bundle Internal 10/100 Base-T & Cisco/Symbol WIFI socket
PrintNet Dual NIC Kit **	Bundle Internal 10/100 Base-T & Lucent/Proxim WIFI socket
Coax/Twinax Interface	Coax/Twinax PCI PCBA
Real Time Clock	Timekeeper IC & SRAM
Rewind Kit	4-inch, 6-inch, 8-inch
Heavy Duty Cutter & Tray Kit	4-inch, 6-inch, 8-inch
Online Data Validation	Bar code validator
RS422 Adapter	Cable connector mounting bracket
GPIO Module	General Purpose Input/Output
Software	
Advanced Tool Kit CD	Includes PrintNet Enterprise Printer Manager, GPIO Manager, CST Manager, Job Capture and Macro Utility
ODV Data Manager CD	Software for use with ODV
*Printer Protocol Interpreters for ZPL, TEC, IPL and Sato print languages with RFID command support for ZPL and Sato.	
** Does not include Radio Card	

6. Mobile Printing System

Combined with our T5000r thermal printer or SL5000r RFID printer, the Mobile Print System delivers bar codes and smart labels directly to locations that need it the most. Its ergonomic design, wireless communication, durable steel frame and heavy-duty wheels combine maximum maneuverability with minimal maintenance.



Benefits

- Reduce centralized printing and manual distribution of smart labels
- Scalable deployment for maximum printing flexibility at compliance locations
- Elimination of expensive, time-consuming, hard-cable configurations
- Centralized control, consistency and diagnostics previously available only in hard-cable managed systems
- Optimized cost efficiency and productivity
- Higher return on investment (ROI) due to accelerated data and inventory movement

Cart Features

- Heavy gauge welded steel construction with four swivel caster wheels for maximum maneuverability.
- Rugged, stainless steel work surface with tough powder black finish.
- Deep cycle heavy-duty battery supports 700 to 1000 cycles to 80% depth of discharge.
- Cable management through legs
- Easy to maneuver
- Scratch resistant powder coat finish
- Stainless steel top

Power Features

- Maintenance-free
- Built to MIL Spec 1-45208 standard for extraordinary long life and reliability
- Easy battery replacement - no special tools required
- Industrial on board battery charger provides efficient, silent and safe charging.
- Plugs into standard 120v receptacle
- Voltmeter battery monitor is standard
- Audible low-battery alarm

7. Online Data Validation

Printronix Online Data Validation (ODV) is an option exclusive to our T5000r thermal bar code and SL5000r RFID printer series. **It's a tool that can save time, money, stalled productivity...** and a lot of frustration.

This unique quality control option can inspect every bar code on every label printed on a Printronix T5000r. Specifically, ODV technology analyzes each bar code just after it is printed. This 100% analysis verifies that the print image falls well within each bar code's published quality specifications to ensure the bar code will scan successfully. If any code on a label fails, the label is automatically cancelled and a replacement label is printed. Bar code labels are a vital link in your production cycle. Unreadable bar codes reduce efficiency, resulting in delayed response to market needs, non-compliance fines and lagging production lines. Online Data Validation analyzes each bar code to ensure it meets stringent verification standards.



Printronix created Online Data Validation to help you avoid such problems.

- ODV stops bad bar codes from getting into your production or distribution systems - without interruption
- ODV's unique void-and-reprint technology allows the system to run unattended, minimizing cost and allowing almost instantaneous ROI

*Printronix has closed the bar code creation process loop with **ODV Data Manager**, a solution for fully automated bar code quality control that:*

- Captures and displays all bar code quality data to ensure enterprise wide remedies for error conditions
- Enables the storage of all bar code quality data in common database applications, such as Oracle and DB2



Combined with Printronix **PrintNet Enterprise**, ODV closes the loop on bar code quality control and provides unprecedented visibility of mission-critical print operations.

8. ODV FAQs

Why do I need ODV?

In real-life label production runs with thermal type printers, barcode image quality can be degraded by conditions that are external to the printer mechanism. Among these:

- A wrinkled ribbon
- Label media defects
- Burned printhead pixels
- Misaligned media
- Improperly adjusted heat, speed, or pressure

Any thermal printer, even a top quality model like the T5000[®], can print degraded barcodes. No thermal printer is immune! That's why you need Online Data Validation.

Exactly what does ODV do?

Whatever condition causes degraded image quality, the fault is not likely to be seen by the naked eye. This could result in the production of a large number of bad barcodes before the problem is detected. ODV checks all picket fence barcodes for scannability immediately after the labels are printed ... without any manual intervention. This read-after-print quality control avoids insertion of bad barcodes into the label production run. Once the bad barcode is identified, ODV cancels it and immediately prints a good replacement. Print production of labels never stops. Result? No loss of productivity! No increased production costs due to manual intervention! No heavy fines due to bad non-scannable barcodes.

How does ODV test barcodes?

Online Data Validation tests each barcode automatically without any host program modification. It:

- Analyzes the incoming data stream and finds every barcode command on every label.
- Prints each barcode label, scans each barcode image and tests the barcode to its symbology specifications.
- Correlates every barcode test result with the incoming data stream's barcode commands.

If all the barcodes meet specifications, the label is good and ready for use. If the label does not meet specifications, ODV uses its data stream analysis to cancel the bad label and print a valid replacement label.

How does ODV achieve total barcode quality control?

ODV achieves total barcode quality control by:

- Making test results viewable from the printer control panel.
- Sending test results over the printer network for viewing by PrintNet[®] Enterprise printer management software.
- Displaying test data and storing it in an XML file. This file can be used by the host computer at a later time to compare the printed barcodes with the data stream sent to the printer.

9. T5000r RFID Upgrade Kits

RFID Upgrade Kit allows a customer to upgrade their standard T5000r thermal bar code printer to an RFID SmartLine printer in the field for an easy transition to RFID when needed.

Features

SL5000r RFID UPGRADE KITS have everything needed to upgrade a T5000r thermal bar code printer to a multi-protocol RFID SmartLine Printer.

- Global frequency kits including UHF encoder (AWID Technology)
- Support for EPCglobal Class 0, 0+, 1, Philips 1.19 and future Gen 2
- RFID software program kit
- All necessary cables and connectors
- PGL RFID programming manuals
- Software migration tools for seamless encoding of smart labels



Asset Protection

The Printronix SmartLine RFID Upgrade Kit allows companies to purchase the thermal bar code printers they need today without worrying how they will fit into future RFID plans. This upgrade path provides asset protection on purchases made prior to the pilot and adoption phase of RFID technology.

10. SL5000r RFID Smart Label Developer's Kit

The Printronix SL5000r RFID Smart Label Developer's Kit is specifically designed to help RFID adopters fast track their RFID pilot programs for testing and process development.

RFID Developer's Environment

One of the most important first steps in developing an RFID program is creating a smart label development environment where you can test smart labels with your supply chain applications. The Smart Label Developer's Kit (SL5000r DK) enables users to print and encode RFID labels and test read ranges, speeds, and locations to optimize RFID usage.



The SL5000r Developer's Kit includes everything you need - printer, encoder, software, certified RFID smart labels, software migration tools, manuals and support - to create your RFID developer's environment right out of the box. By generating RFID Smart Labels with the developer's kit, you can begin your process to:

- Test RFID label and tag read ranges, read speeds and data capture
- Determine optimum smart label placement
- Establish the best locations for fixed RFID reader terminals
- Check for radio frequency interference

Kit Contents

SL5204r DK 869, 203 dpi SL5204r DK 869, 203 dpi Developer's kit includes a SL5204r MP thermal printer with an integrated AWID UHF encoder, 1000 Philips UCODE EPC 1.19 certified smart labels from Rafsec, one Thermal ribbon, and PrintNet 10/100 Base-T NIC. The following labels must be ordered with each DK model Dev Kit: 72mm x 72mm labels - 179255-001

SL5304r DK 869, 300 dpi SL5304r DK 869, 300 dpi Developer's kit includes a SL5304r MP thermal printer with an integrated AWID UHF encoder, 1000 Philips UCODE EPC 1.19 certified smart labels from Rafsec, one Thermal ribbon, and PrintNet 10/100 Base-T NIC. The following labels must be ordered with each DK model Dev Kit: 72mm x 72mm labels - 179255-001

Once you're satisfied that your RFID test environment has provided enough insight into your smart labeling requirements, you can define and start your RFID program. You will then want to move to the SL5000r Smart Label printer.

11. [SmartLine SL5000r RFID Smart Label Printers](#)

Printronix delivers the next generation of RFID printers, the T5000r, that enable encoding and printing of various smart label sizes and antenna designs to support today's EPC standards with an easy upgrade path to future requirements.



SL5000r RFID Printers

The SL5000r is the next generation family of RFID printers. These printers feature Printronix 5r leadership-by-design and RFID Smart encoding technology to address a wide range of applications and global frequency requirements.

Benefits

- SCALABLE** ➤ The SL5000r family of RFID printers offer multi-protocol capabilities that support EPCglobal Class 0, 0+, 1, Gen 2* and Philips 1.19 standards and global frequency requirements.
- INNOVATIVE** ➤ The widest range of thermal printer emulations allows for easy consolidation of multiple thermal printer brands reducing maintenance costs and configuration time.
- BEST-OF-BREED** ➤ PowerPC controller and new high-performance 5r driver deliver industry-leading throughput for more efficient applications.
- BUILT FOR CHANGE** ➤ The SL5000r RFID printers are compatible with EPCglobal Class 1 Gen 2* smart labels via a free firmware update.
- SMART** ➤ All SL5000r printers feature intelligent RFID tag management that identifies and overstrikes substandard RFID smart labels preventing them from entering your supply chain.

Additional Features

- Integrated RFID UHF encoder meets global frequency standards
- Smart Label encoding, validation and overstrike capability
- Intelligent media detection saves expensive RFID smart labels by flashing a warning when RFID media is present but no RFID command is in the data stream
- PGL, ZPL™ and SATO RFID programming language support
- Unique dual motor ribbon system eliminates clutch replacement and ribbon wrinkle
- Snap-in print head allows operator to easily replace print heads and change from 203 dpi to 300 dpi printing without firmware or software changes
- Wireless/Ethernet option provides real-time data access and local printing flexibility
- Online Data Validation option offers a complete bar code/RFID compliant solution
- Printronix PrintNet Enterprise option provides instantaneous visibility to every network printer and allows simultaneous configuration and management of an unlimited number of Printronix printers
- Greater ribbon capacity eliminates frequent attention and disruption to workflow

Asset Protection

The Printronix SL5000r smart label printers provide RFID solutions compliant to today's standards and compatible for growth to expand to tomorrow's needs. Built on the 5r Multi-Technology Platform, the SL5000r offers a foundation for protocol upgradeability such as expansion to EPCglobal capabilities via firmware upgrades, including future upgrades to allow EPCglobal 1 Gen 2 compatibility. To offer global compliance, these printers can be switched to other regional frequencies via a global upgrade kit.

12. [SL5000r Models](#)

SL5000r Models		
Model	SL5204 ^f	SL5304 ^f
Resolution (dpi)	203	300
Technology	Thermal Transfer /Direct Thermal	
RFID Smart Encoding	AWID Multi-Protocol UHF Encoder	
Processor	32-bit PowerPC 166-MHz	
memory	32MB DRAM, 8MB Flash	
Print Width (max)	4.1"	
Speed (max)	10/8 IPS	
Connectivity (Std)	Serial, Parallel, USB	
Connectivity (Opt)	Coax, Twinax, PrintNet 10/100 Base-T, PrintNet Wireless NIC, PrintNet Dual NIC Kit, GPIO, RS422	
Interpreter	Zebra, TEC, Intermec, SATO	
Options	ODV (Online Validator), Rewinder, Cutter with Tray Kit, Real Time Clock	

Print Management Solutions

To meet the demands of today's enterprise networks — which range in size from one distribution center to a global infrastructure comprised of hundreds of printers — Printronix has developed unique software solutions that enable easy integration, control, visibility, and management of your print operations.

Key solution enablers include:

- **Advanced Tool Kit (ATK)** - provides remote printer diagnostics from a central location.
- **GPIO** - designed specifically for those who want to integrate Printronix T5000^r thermal printers with other systems.
- **ODV Data Manager** - ODV Data Manager helps customers manage industrial network printer systems, while providing a safeguard against the high costs associated with bar code scanning and data accuracy failure.
- **Printer Interpreters** - allows easy integration of Printronix printers into environments with other manufacturers legacy devices.
- **PrintNet® Enterprise** - the perfect tool for IT managers to raise the efficiency of their print operations.
- **SAP Printing** - our extensive experience with SAP printer integration insures the smoothest possible implementation of your total SAP project.
- **BarTender** - the leading true Windows barcode label software program

13. Advanced Tool Kit - Remote Printer Diagnostics

Remote Diagnostic and Problem Resolution

Remote printer management is essential in managing geographically distributed printers from a central location. As new operations and systems are implemented, remote diagnostic and problem resolution tools may be required.

With the Printronix Advanced Tool Kit (ATK) you can:

Capture print jobs

- Jobs sent to the printer are mirrored back to the ATK. You see exactly what was received at the printer.
- Job capture on all supported printer interfaces: Serial, Twinax, Coax, and Ethernet
- Network print jobs can be captured remotely across the network
- All network traffic/protocol information is automatically stripped out
- No network knowledge or experience required to capture network print data.
- View captured job data in hex or text modes
- Show printer control codes as dots, mnemonics, or normally
- Capture job with or without printing the output
- Save/retrieve captured job to/from file

Fix data stream problems

- Find and replace one set of characters and/or strings with another set
- Find and delete characters and/or strings from the job data stream
- Insert characters and/or strings into a specific location within the job data stream
- Add host response signals to specific locations within the job data stream
- Link these corrections to a specific printer configuration and make it active only when jobs are sent to a specific print queue

Printronix Advanced Tool Kit can help you with:

System Rollout

Prototyping an application or system before rollout is a prudent approach to minimizing operational disruptions. Unfortunately, as new operations or systems are implemented, unforeseen problem always seems to occur. Having the proper diagnostic tools can help you quickly identify the problem and solve it. Printronix ATK enables you to solve unforeseen problems quickly and easily...all around the globe, from a single location.

Here is how ATK helped one customer:

A customer needed to implement a new operation that required thermal label as part of its new system. The entire process was developed and prototyped before implementation. When the system was rolled out, the printer was unable to print the thermal labels. When a job capture was examined, it was determined that the cause of the problem was extra control characters inserted by their job queue management software. This problem never occurred during their development since a different queuing system was used in their prototype lab. To solve this problem, the customer needed a way to strip out the extra control characters. Using the ATK, a character substitution table (CST) was created to automatically identify and remove the extra control characters, eliminating the problem.

Legacy Migration

The power of the Printronix Advanced Tool Kit can be applied to help resolve your legacy migration issues. As equipment ages and needs to be replaced, the legacy applications created for the old equipment may need to be replaced or modified as well. Replacement or modifications may cost many times the price of the hardware. Before, you had no choice. Now with Printronix Advanced Tool Kit, you do. Using the character substitution table (CST) capability of the ATK, you can modify the print data

stream at the printer. CST dynamically converts old legacy printer codes into Printronix printer codes, making Printronix printers compatible with your legacy applications. CST runs on the printer and does not require any host interaction. Once installed, CST can be enabled only for legacy application jobs. All other print jobs will pass to the printer untouched.

Total Control Over Your Printer

The Printronix Advanced Tool Kit gives you control over your printer outputs, which is not possible with any other printer. With ATK, you gain total control of printer output.

14. [GPIO Module & GPIO Manager](#)

Printronix has expanded its growing portfolio of printer management solutions and enhanced the functionality of its thermal printers with the General-Purpose I/O (GPIO) Module and GPIO Manager.

The GPIO Accessory Module

The GPIO accessory module is designed specifically for those who want to integrate Printronix T5000^e thermal printers with other systems, such as label application systems, programmable logic controllers, light stacks and host computers. The GPIO accessory module is comprised of an I/O circuit board that is easily installed in a T5000^e printer.

Simple printer menus allow programming of specific interface signals for proper polarity or logic functions that can meet all typical interface print/apply requirements or be compatible with the functions of all major competitors' interfaces. When combined with the GPIO Manager software, the GPIO modules leverages Printronix's exclusive solutions enablers, such as the Online Data Validation (ODV™) system, resulting in the industry's most cost-effective solution, using the least amount of hardware.

The GPIO Manager Software

The GPIO Manager software is a flexible, PC-based program offering simple and intuitive programming tools, including a graphical user interface (GUI) with pull-down menus, "self-documenting" with an audit trail for each line, and the ability to edit and upgrade quickly on a single screen.

Additionally, the GPIO Manager software can program and map desired actions from the T5000^e series printer and GPIO accessory module to pre-defined events, such as "printer online", "label present", "label taken" and "printer error". The GPIO accessory module contains eight optically isolated inputs, eight optically isolated outputs and four relay outputs, all available for GPIO Manager mapping. In addition, printer functions, such as keypad switches, serial communication ports and proprietary ODV analysis parameters, are available with the GPIO Manager, extending its mapping functions.

Integrators of the T5000^e series printers with label application systems can program a seamless system with simultaneous functions when a label is printed. For example, signals are sent to the label applicator, a light stack is illuminated for visual bar code or printer status indications, and printing resumes after the label applicator has received the label.

Additionally, printer keys can be programmed with special functions for custom user access, and specially formatted priority data transmissions can be sent to a host for specific conditions. The system allows virtually boundless creative and economic solutions for value-add opportunities.

15. [ODV Data Manager](#)

Closing the loop on bar code quality control.

Imagine a world in which bar code verification systems could integrate with enterprise networks, eliminating costly bar code rejection and capturing real-time data about printing applications. Imagine if customers could monitor and review all bar codes printed and then merge the data into custom reports, all while improving Return on Investment.

With our exclusive **Online Data Validation** option integrated with the **ODV Data Manager** and **PrintNet Enterprise**, imagination is not needed. ODV Data Manager provides robust data capturing and exporting capabilities and the ability to evaluate data within each bar code. It merges information into databases and ports it to any application, such as SAP or Oracle.

ODV Data Manager helps customers manage industrial network printer systems, while providing a safeguard against the high costs associated with bar code scanning and data accuracy failure.

The Printronix Online Data Manager provides the following functions:

- Ability to capture bar code and validation data
- Ability to export captured data to either an ASCII file or SQL database
- Ability to stop the device and alert the operator of a problem.

All data captured by the ODV Data Manager is date and time stamped, and associated with the printer generating the data. Collected data is either stored in a history file or immediately exported to an external SQL database. Data stored in the history file can be saved in either a comma separate variable (CSV) file format, or as an XML report. Data from a single printer or multiple printers can be saved in either a single file or in multiple files.

16. Printer Interpreters

Printronix native printer interpreters, available for the T5000^e family of thermal printers, allow Printronix printers to accept foreign print data streams and translate them into low level native print commands, resulting in printed output nearly identical to that of the legacy device. Advantages of migrating to Printronix printers utilizing the native interpreters include:

- No Programming Changes** ➤ Often times changing current hardware, or adding new devices to an existing system equates to a long-term project for the enterprise design team. Utilizing the native interpreters, new printing systems can be easily added with no reprogramming.
- Performance** ➤ Printers using the native interpreters will match or exceed the performance of the legacy machine.
- Quality** ➤ With native interpreters users will now be able to take advantage of our exclusive Online Data Validation option to assure 100% barcode scannability which is not available on their legacy system.
- Management** ➤ Replacing a legacy printing system with Printronix printers introduces the unique ability to remotely manage numerous printers simultaneously. Total print management will be provided without any enterprise systems changes using our industry leading remote printer management tool, PrintNet Enterprise.

17. PrintNet Enterprise

The Latest Advancement in Network Printer Management

PrintNet Enterprise Remote Printer Management 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 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 and fully compatible with Printronix line matrix & fanfold printing solutions that frequently operate in the same enterprise network

By leveraging the full power of today's enterprise network technology, PrintNet Enterprise combines a fully integrated Ethernet adapter with remote management software to produce an unprecedented level of visibility and control. The results - an increase in efficiency of your print operations! With PrintNet Enterprise, you can organize your networked Printronix thermal, line matrix and laser printers into a worldwide printing network that you can remotely control and monitor from a single PC. Start lowering your costs... saving time... boosting productivity with PrintNet Enterprise.

How Does PrintNet ® Enterprise Meet These Challenges?

- Visibility
- Instant Alerts
- Remote Presence
- Total Control
- Program Once-Influence Many

Visibility

Whatever the status of your printers, you will receive a message with a clear and comprehensive view of your entire printer operation.

- Main Status Screen – Displays the status of every printer under management, including a “gas gauge” indicating ribbon levels and color-coded icons highlighting problem spots and text messages.
- SNMP – Fully supports the printer MIB, making PrintNet Enterprise-equipped printers visible and accessible with tools such as HP OpenView, WebJet Admin, Tivoli, Computer Associates Unicenter TNG, Sun Net Manager, and Castle Rock SNMPC.

Instant Alerts

You are instantly notified when a printer situation demands immediate attention. Whether by e-mail, pager or cell phone, these instant messages can be generated to a specific responder, varying according to class of alert. Even if the printer is totally dead due to catastrophic power supply, controller failure, or loss of power, an instant alert is generated. Alerts can be delivered in numerous ways: Email Message, SNMP Traps, Syslog, Logged to File

Remote Presence

From any network PC or workstation, you can quickly diagnose a problem without the need to travel to the printer.

- Web Access – Configuration management and remote control panel are accessible over the web using standard web browsers.
- Remote Control Panel – View and operate any printer's control panel online as if it is local.
- Remote Configuration Access – View and modify printer configuration settings.
- Remote Flash File Access – View, download, and upload user files in the printer.

Total Control

Whatever the situation demands, you have total control of your printers. Change printer settings, update firmware, download fonts, clear buffers – even lock out local operators from making changes. All these controls are available to you without ever going to the printer.

- Configuration Editor – Creates, saves, and downloads configuration tables consisting of all parameters.
- Configuration Locking - Controls which printer settings, firmware updates and downloaded fonts can and cannot be modified by local operators, including the ability to completely exclude them from making any changes.
- Flash File Manager – Add, remove and move files (such as fonts and predefined forms) stored in the printer's flash file area.
- Automated Firmware Updates – Firmware versions of one or more printers can be updated at the same time. All configurations and files are automatically retrieved and restored as part of the update.
- Speed Keys – One-touch access to change the most commonly accessed printer settings.
- Automatic Configuration Switching – Tie a printer configuration to one of eight internal print queues. Whenever a job is sent to that queue, the specified configuration is automatically loaded. This feature ensures that your jobs will be processed with the correct configuration every time.

Program Once – Influence Many

You can ensure all printers have a common configuration by programming once and sending the programming to all your printers.

- Individual, Group or Broadcast Management – Perform an operation to entire groups of printers with one set of commands. There's absolutely no need to configure printers individually.
- Printer Database – Allows organization of printers into groups matching applications, locations, or any other criterion the environment demands.

18. SAP Printing

SAP Solutions

Printronix printers are in use in over 200 SAP installations across 4 continents worldwide. Our extensive experience with SAP printer integration insures the smoothest possible implementation of your total SAP project.

Direct Connect

Printronix pioneered barcode printing from SAP. You may be a candidate for our direct connect methodology which eliminates the need to purchase expensive middleware.

When Printronix went live with SAP in 1995, it needed to print barcodes from the Production Planning and Material Management modules. At the time there was no way to do it without buying expensive middleware, so we developed our own device types and methodologies, which we call **SAP Direct Connect**.

Advantages of SAP Direct Connect include:

- Centralized control over label printing
- Real time access to SAP data
- Elimination of redundant databases
- Maximizing existing investment in SAP

Device types reside in tables within the SAP spooling system. They provide the formatting information your ABAP/SAPscript program requires to print properly. Device Type components include: character set information, print controls, barcode definitions, and page formats.

Our printing methodology can be applied to both standard SAP programs (via User Exits) and custom programs. Using layout sets can facilitate design and maintenance of your forms and labels, as well as provide security benefits.

Currently Printronix offers three categories of device types for different printing applications:

1. **LP+ SAP Device Type** - For Printronix Thermal, Line Matrix and Laser Printers.
Excellent for applications primarily involving text processing with some graphics, such as forms and simple labels. Integrates easily into existing SAP environments
2. **ASCII SAP Device Type** - For Printronix Thermal, Line Matrix and Laser Printers
Optimal for applications requiring more extensive graphics including boxes, such as complex label applications. WYSIWYG form design simplifies or eliminates the need for Sapscrip/SmartForm code.
3. **PCL5 SAP Device Type** - For Printronix Laser Printers
Ideal for out of the box integration into all existing SAP laser applications (requires PCL5 emulation)

SAP Expertise

We work with companies around the globe in industries and markets such as automotive, chemical, retail, healthcare and pharmaceutical, and consumer goods manufacturing. Download a few of our customer success stories or submit a question to one of our SAP experts.

SAP Consulting

Is your SAP project on a tight deadline or are you having difficulty printing customized forms or labels? Leverage years of SAP implementation experience with Printronix Professional Services. [Click here.](#)

Software downloads

For graphics conversion tools, the latest device types and SAP registered application notes [click here](#). Be sure to check out our all-new section covering integration with SmartForms.

[19. BarTender Label Design Software from Seagull Scientific](#)

BarTender is the leading true Windows barcode label software program. This professional label design and bar code software tool has powerful features for compliance labels and integration with enterprise software. It even supports RFID tags. Yet BarTender is so easy, it gets beginners designing in minutes.



Bar Tender Editions

Features

Enterprise Edition

Our most powerful Edition includes features that simplify the integration of BarTender with other software products. The Enterprise Edition is particularly helpful for controlling label design and printing across networks.

- ActiveX Automation for more powerful and interactive control by other Windows programs.
- SAP Certified IDoc Interface (mySAP.com and R/3). Commander Utility for easier integration with non-Windows programs.
- All "Professional" BarTender label design features.
- Standard licensing for Enterprise Edition allows installation on an unlimited number of workstations.
- All Enterprise Editions are "international" editions that support on-demand switching of the user-interface between multiple languages.

Professional Edition

This Edition contains the features needed by experienced label designers, without sacrificing the ease-of-use required by first-time users. The Professional Edition delivers a very wide range of capabilities, including extensive data sourcing, and more:

- All BarTender label-design and graphics features.
- Custom data-entry forms Password protection
- Professional Edition licensing is based on the number of **workstations** on which BarTender will be installed. (There are no restrictions on the number printers that the Professional Edition can use.)

Print Only Versions

Users that need to print at multiple stations (but don't need to *design* at all of them) can lower their costs with "Print-Only" versions of BarTender. Print-Only software is ideal for use on all workstations where the ability to load and print existing label designs is required, but *modifying* the label designs before printing is not. (The Print-Only BarTender can still read input data files and accept keyboard data entered into custom "prompt" dialogs. You just can't make any changes to the label design itself.)

Connectivity Solutions

Previously, running multiple printers and printing technologies off the same network required specialized drivers and codes for each platform. Today, the Printronix System Architecture (PSA3) enables all printers in the Printronix family to use common software architecture.

Using the same commands and drivers, regardless of platform or printer engine technology, PSA3 allows all of Printronix as well as other company's printer emulations, operator menus and configuration options to work in a similar way, resulting in greater consistency and versatility, higher printing efficiency and less training time.

To continue our focus on ease of use and increased efficiency, Printronix has expanded its suite of specialized connectivity solutions to include:

- **TN5250/TN3270** - legacy migration tool
- **Wireless and Mobile Printing** - enables flexible, on-demand printing

20. TN5250/TN3270

SNA – TCP/IP Migration or Integration

TCP/IP has become the de facto standard for open networks; all major computers and networks support for TCP/IP. As corporations seek operational efficiencies, they are consolidating their networks, and the network of choice is TCP/IP. Migrating from SNA (System Network Architecture) to TCP/IP represents a massive change in a corporation's network infrastructure. To ensure a smooth transition from SNA to TCP/IP - or an integrated SNA – TCP/IP environment - Printronix offers SNA-to-TCP/IP products for both OS/390 and AS/400 environments.

Two emulation options - TN3270e and TN5250e - let Printronix printers function as Coax- and Twinax-attached printers over TCP/IP without any operational difference. The TN3270e and TN5250e emulations provide for true host printing by encapsulating SNA data in TCP/IP packets. The TN3270e emulation serves OS/390 operating environments and requires a TN3270e server attached to the host. The TN5250e emulation is for AS/400 environments and requires a TN5250e server attached to the host.

21. Wireless Printing

The Printronix Wireless Printing Solution takes the modern enterprise user far beyond the bounds of mere connectivity into the world of free-flowing, flexible print management. Sliding seamlessly into your wireless network, and powered by the absolute benchmark in industrial network print management, PrintNet Enterprise, this remarkable technology:

- Allows the enterprise user full and complete flexibility of location and application.
- Eliminates the time consuming and expensive re-configuration of hard-cabled systems when Warehouse or Manufacturing floor changeovers happen.
- Provides the centralized control, consistency, and diagnostics previously available only in hard-cabled PrintNet Enterprise-managed systems.

System Characteristics

- The wireless option is an 802.11b Wi-Fi compatible interface.
- Support is provided for Cisco and Lucent PCMCIA WLAN radios.
- The interface option is fully integrated into the printer supporting radios with either end-cap or external antennas.
- The kit includes a 'rubber duck' dipole antenna and cabling to ensure reliable connectivity for those customers using radios with MMCX connectors.
- The radio cards without end-cap antennas can be secured in the printer to prevent theft or damage.
- This dual wireless / Ethernet option is available on both the T5000^e thermal and P5000 line matrix printers.

System Benefits

Flexibility of Physical Configuration:

Today's high volume Supply Chain logistics and Manufacturing environments often require rapid-fire changes in the actual physical layout of the facility.

- Wireless connectivity enables fast and easy re-configuration of the work place.
- When manufacturing areas have to be re-designed there is no need to be concerned about cable drops. Printers can be moved close to the point of application quickly and easily.
- Wireless permits quick deployment for temporary printer applications to accommodate both seasonal high volume use and short-term promotional marking.



Flexibility of Connectivity:

The Unique Printronix dual NIC design allows Printers to function in either wired or wireless mode. If a series of wireless access points goes down for any reason, the printer can immediately be used with standard wired Ethernet capability, without missing a step.

Mobility:

When combined with Printronix Mobile Print System (which utilizes a cart equipped with a battery power source) the wireless printer brings new levels of mobility and efficiency by allowing the operator to bring work to the work point. This results in productivity gains from fewer footsteps, less mistakes, and increased employee satisfaction.

Scalability:

The inclusion of both wired and wireless interfaces allows for future migration to support the enterprise's growing needs.

Control:

Printronix PrintNet® Enterprise software has been enhanced for wireless printing. It supports full visibility of both wired and wireless printers, instant alert of error conditions, remote configuration of printer parameters, broadcast firmware updates, auto-discovery, web-browser control, and much more.

22. Further Details and/or Onsite Demonstrations:

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