



SMARTLINE SL5000^e RFID SMART LABEL PRINTERS

A FAMILY OF RFID PRINTERS PROVIDING THE LATEST EPC TECHNOLOGY

Printronix presents the next generation family of RFID printers that deliver the latest innovations in RF encoding and printing technology to address a wide range of supply chain and compliance applications. As the adoption of RFID technology accelerates in retail and government supply chain operations, so must the printing solutions for smart labels. SmartLine™ RFID printers enable encoding and printing of various label sizes and antenna designs that have emerged as popular standards through early adopter pilot programs. In addition to label size and antenna design, the need for specific encoding technology to support today's EPC standards with an easy migration path to tomorrow continues to be important.



**DELIVERING
RFID SMART™
LABEL SOLUTIONS
FOR A WIDE
RANGE OF
APPLICATIONS.**

KEY PRODUCT ATTRIBUTES OF THE SL5000^e

- Integrated RFID UHF 915MHz encoder
- Smart Label encoding validation and overstrike capability
- PGL and ZPL™ programming languages with RFID command sets
- Unique dual-motor driven ribbon system eliminates clutch replacement and greatly reduces the risk of ribbon wrinkle for superior print quality
- Exclusive snap-in print head reduces service calls by allowing operator to easily change print heads and change from 203DPI to 300DPI printing without firmware or software changes
- Wireless/Ethernet option provides real-time data access and local printing flexibility; includes Printronix PrintNet® Enterprise, a web-enabled remote network print management system that provides instantaneous visibility to every network printer and allows users to simultaneously configure and efficiently manage an unlimited number of Printronix printers; this edition of PrintNet Enterprise also supports management of the additional RFID encoder capabilities

SL5000^e™ RFID PRINTERS

Two models provide customers with a choice of encoding technologies:

- **SL5000^e MP*** – provides multi-protocol capabilities to address applications that require Class 0, 0+, 1 standard
- **SL5000^e C1** – provides capabilities to address applications that require an optimized Class 1 standard solution

The SL5000^e MP and SL5000^e C1 support the following label sizes with various antenna designs.

Alien 'Squiggle' Class 1	4" x 2", 4" x 4", 4" x 6", 4" x 8"
Alien 'M-tag' Class 1	4" x 4", 4" x 6", 4" x 8"
Rafsec #313 'Psychedelic' Class 1	3" x 3"
Matrics 'Dual Dipole' Class 0, 0+ **	3" x 3"

* Class 0 and 0+ capabilities will be available via a software upgrade, please contact Printronix or a Printronix Certified RFID Integrator for availability.

** SL5000^e MP only

ASSET PROTECTION

The Printronix SmartLine RFID Printers provides early adopters an RFID solution compliant to today's standards, and growth to expand to tomorrow's needs.

In addition, the SL5000^e MP is a uniquely designed multi-protocol platform providing a foundation for protocol upgradeability and expansion through firmware updates.

SMARTLINE PRINTER SPECIFICATIONS

SL5000^e RFID PRINTERS

SL5000 ^e MP	Multi-protocol – AWID Technology Support for Class 0, 0+, 1 915 MHz UHF encoder
SL5000 ^e C1	Class 1 protocol - Alien Technology Support for Class 1, 915 MHz UHF encoder

PRINTING CHARACTERISTICS

Print Speed	SL5204 ^e : 10 IPS @ 203DPI (254mm/sec) SL5304 ^e : 8 IPS @ 300DPI (203mm/sec)
Printing Methods	Thermal Transfer or Direct Thermal
Resolution	203/300 DPI (operator interchangeable)
Printable Width	4.1" max

RECOMMENDED LABEL CHARACTERISTICS

RFID Inlay Labels:	
Alien 'Squiggle' Class 1	4" x 2", 4" x 4", 4" x 6", 4" x 8"
Alien 'M-tag' Class 1	4" x 4", 4" x 6", 4" x 8"
Rafsec #313 'Psychedelic' Class 1	3" x 3"
Matrics 'Dual Dipole' Class 0, 0+	3" x 3" (via software upgrade)

RFID ENCODING MODES

Integrated RFID reader and antenna assembly	
Supports Class 0, 0+, 1 tags	
Operation Modes	Write/Verify/Print – writes RFID data to tag and verifies contents are written correctly, while also printing the desired image
Error Handling Modes	Overstrike – when a bad RFID tag is detected, overstrikes label and applies the data with the next label Stop – when a bad tag is detected, stops the printer to allow for user invention
Statistics Tracking	Tracks number of tags written to and number of bad tags detected

RFID SOFTWARE MIGRATION TOOLS

Migration tools allow RFID tags to be automatically programmed with data from the following bar code symbologies:

- GTIN carriers ITF-14 and UCC/EAN-128
- EPC data within a Code 39
- UPC-A, EAN-8, EAN-13

Some restrictions may apply. Contact a Printronix Certified RFID Integrator for details.

MEDIA HANDLING CHARACTERISTICS

Tear-Off	Individual label tear-off
Tear-Off Strip	Label strips tear-off
Continuous	Labels print continuously
Peel	Labels peel from liner without assistance (peel mode requires rewind option)

MEDIA COMPATIBILITY

Media Types	Roll or fanfold Die cut or continuous Labels, tags and tickets Paper, film or synthetic stock Thermal Transfer or Direct Thermal
Media Width	1.0" to 4.5" (SL5204 ^e /SL5304 ^e)
Media Thickness	0.0025" to 0.010"
Roll Core Diameter	3.0" (7.6 cm)
Maximum Roll Diameter	8.0" (20.9 cm)
Thermal Transfer Ribbon	
Ribbon Width Range	1.0" to 4.33" (SL5204 ^e /SL5304 ^e)
Ribbon Capacity	625m

RECOMMENDED RIBBON CHARACTERISTICS

Ribbon	625m length 4.33" width Model 8500 premium wax formulation Model 8300 wax formulation
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OPERATOR CONTROLS & INDICATORS

Operator Controls	Off Line-On Line, Test Print, Job Select, Form Feed Menu, Cancel, Enter
Message Display	32 character
Indicators	Off Line-On Line, Menu

PROGRAMMING LANGUAGE

Standard	PGL – Printronix Graphics Language ZPL – Zebra Programming Language
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BARCODE SYMBOLOGIES AVAILABLE

Code 39, Code 128 (A, B, C) Codabar, Interleaved 2 of 5, FIM UPC-A, UPC-E, UPC-EO, EAN 8, EAN 13, Code 93, Postnet, Postbar UCC/EAN 128, PDF 417, UPS Maxicode, Royal Mail, Datamatrix

SENSING METHODS

Transmissive, Reflective (Gap, Mark, Notch, Continuous Sensing Form)

INTERFACES

Standard	Serial RS232 IEEE 1284 (Centronics)
Optional	Ethernet (PrintNet) Dual Ethernet/Wireless (802.11b)

FONTS, GRAPHICS SUPPORT, WINDOWS DRIVERS

Fonts	OCRA, OCRB, Courier, Letter Gothic CG Triumvirate Bold Condensed
Graphic Support	PCX and TIFF file formats
Windows Drivers	Windows 95/98/2000/XP

MEMORY

DRAM	8Mb standard (16Mb optional)
Flash	4Mb standard (10Mb optional)

POWER REQUIREMENTS

Line Input	90–264 VAC (48–62Hz), PFC
Power Consumption	150 watts (typical)
Regulatory Compliance	FCC-B, UL, Energy Star mode (<45 watt)

ENVIRONMENTAL CONSIDERATIONS

Operating Temperature	5°C to 40°C
Dimensions	11.7" W x 20.5" L x 13.0" H (SL5204 ^e /SL5304 ^e)
Printer/Shipping Weight	42lbs/51lbs (SL5204 ^e /SL5304 ^e)