

# SMARTLINE SL5000r ENERGY STAR

## SCALABLE

Multiple emulations allow standardization on a single printer for environments with mixed printer languages

## INNOVATIVE

True Gen 2 RFID Smart™ encoding technology includes an official EPCglobal Gen 2 Certified Hardware module

## BEST OF BREED

Aluminum die cast design, ventless cooling, and high performance processor for harsh environments and high duty cycle applications

## SMART

Intelligent tag management system identifies and overstrikes defective smart labels



## INDUSTRY LEADING RFID PRINTING TECHNOLOGY

Based on the 5r Multi-Technology Platform and patented MP2™ RFID Smart encoding technology, the SL5000r™ ENERGY STAR® MP2 delivers true Gen 2 encoding designed to EPCglobal Gen 2 specifications. The MP2 is the leading encoding technology on the market today with EPCglobal Gen 2 Certified Hardware. This certification mark gives users peace of mind that the printer/encoder complies with EPCglobal standards and has been rigorously tested, assuring predictable results for RFID pilots and implementation. Through **leadership by design** the SL5000r MP2 delivers support for EPCglobal Gen 2 standards plus industry leading performance and global frequency options.



## ASSET PROTECTION

With the SL5000r MP2, Printronix continues to deliver RFID leadership for UHF RFID printing solutions with today's standards using tomorrow's technology. The 5r Multi-Technology Platform offers the foundation for standardization and upgradeability as EPCglobal standards continue to evolve. Ethernet connectivity and printing solutions leverage PrintNet® Enterprise and PXML to achieve RFID supply chain potential. For global compliance, SL5000r MP2 can switch frequencies via regional kits.

## KEY FEATURES

- Products that earn the ENERGY STAR prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy
- Patented multi-position RFID coupling device optimizes performance for a broad variety of tags
- Intelligent Media Detection prevents non-RFID print jobs from printing on RFID labels, avoiding unnecessary expense
- Embedded EPC privacy logo simplifies label design and system set-up
- Integrated EPCglobal certified multi-protocol UHF RFID encoder meets global frequency requirements
- XML forms printing with embedded industry standard forms and templates
- Printronix Extensible Markup Language (PXML) interface enables real-time printer and job control



PRINTRONIX®

# SMARTLINE SL5000r ENERGY STAR

## MP2 TECHNOLOGY

The RFID SL5000r ENERGY STAR printer includes Printronix industry leading MP2 RFID Smart encoding technology:

- Gen 2 hardware certified UHF RFID encoder
  - Configured to approved global frequency standards
  - Supports EPCglobal Class 1, Gen 2 standards
- Multi-position RF coupler, Advanced Printer Encoder Firmware

## MEMORY

|       |               |
|-------|---------------|
| DRAM  | 64MB standard |
| Flash | 16MB standard |

## PRINTING CHARACTERISTICS

|                  |  |
|------------------|--|
| Print Speed      | SL5204r-4": 10 IPS @ 203 dpi (254mm/sec)<br>SL5304r-4": 8 IPS @ 300 dpi (203mm/sec)<br>SL5206r-6": 10 IPS @ 203 dpi (254mm/sec)<br>SL5306r-6": 8 IPS @ 300 dpi (203mm/sec) |
| Printing Methods | Thermal transfer or direct thermal   |
| Resolution       | 203/300 dpi (operator interchangeable)   |
| Printable Width  | 4.1" max (104mm) (SL5204r/SL5304r)<br>6.6" max (168mm) (SL5206r/SL5306r)   |

## RFID CAPABILITIES

|                        |   |
|------------------------|---|
| Operating Capabilities | Encode with automatic verification and read with or without lock<br>Access Gen 2 memory spaces like TID, EPC, User and the Lock and Kill passwords  |
| Error Handling Modes   | Overstrike – Overprint failed or "bad" RFID tag and applies the data to the next label<br>Stop – Pause after detecting a failed or "bad" tag for user intervention<br>None – ignores all errors |
| Statistics Tracking    | Track the total number of RFID labels processed and the number of failed (overstruck) tags  |

## MEDIA COMPATIBILITY

|                         |   |
|-------------------------|---|
| Media Types             | Roll or fanfold<br>Labels, tags and tickets<br>Paper, film or synthetic stock<br>Thermal Transfer or Direct Thermal |
| Media Width             | 1.0" to 4.5" (SL5204r/SL5304r)<br>2.0" to 6.8" (SL5206r/SL5306r)  |
| 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 (min/max)  | 1.0" to 4.33" (SL5204r/SL5304r)<br>2.0" to 6.8" (SL5206r/SL5306r)   |
| Maximum Ribbon Length   | 625m  |

## MEDIA HANDLING CHARACTERISTICS

|                |  |
|----------------|--|
| Tear-Off       | Individual label tear-off  |
| Tear-Off Strip | Label strips tear-off  |
| Continuous     | Labels print continuously  |
| Cut            | Label cut to length  |
| Peel-Off       | Label peel and present<br>(peel-off mode requires rewind option) |

## MEDIA HANDLING OPTIONS

|            |  |
|------------|--|
| Rewinder   | Required for peel and present. Not recommended for batch rewind of RFID labels         |
| Cutter Kit | Cuts labels after printing specified number of labels. Not recommended for RFID labels |

## 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  |

## BAR CODE VALIDATION

|          |   |
|----------|---|
| Optional | Online Data Validation (ODV) - verifies bar code quality, overstrikes failed bar codes, and reprints a label<br>Compatible with RFID encoding |
|----------|---|

## PROGRAMMING LANGUAGES

|          |  |
|----------|--|
| Standard | Printronix Graphics Language (PGL)†<br>Zebra Graphics Language (ZGL)†<br>TEC Graphics Language (TGL)<br>Intermec Graphics Language (IGL)<br>Sato Graphics Language (STGL)†<br>Datamax Graphics Language (DGL)<br>IER Siège® Graphic Language (IEGL)<br>Monarch Graphic Language (MGL)<br>XML – Extensible Mark-up Language |
|----------|--|

## PROTOCOLS

|          |                      |
|----------|----------------------|
| Optional | Telnet TN5250/TN3270 |
|----------|----------------------|

## BAR CODE SYMBOLOGIES AVAILABLE

AUSTPORT, Aztec, BC35, BC412, CODABAR, Code 11, Code 35, Code 39, Code 93, Code 128 (A,B,C), EAN8, EAN13, FIM, I-2/5, German I-2/5, GS1-128, GS1-Databar, GS1-DATAMATRIX, IMB, Interleaved 2/5, ITF14, Matrix, MAXICODE, MSI,PDF417, PLANET, PLESSEY, POSTNET, POSTBAR, ROYALBAR, TELEPEN, UPC-A, UPC-E, UPC-E0, UPCSHIP, UPS11

## SENSING METHODS

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

## INTERFACES

|          |  |
|----------|--|
| Standard | Ethernet (supports PrintNet Enterprise and PXML)<br>RS232 Serial<br>IEEE 1284 (Centronics)<br>USB 2.0  |
| Optional | Wireless (802.11b/g, 54mbps)††<br>128bit WEP<br>WPA-PSK / TKIP (Personal)<br>WPA2-PSK / AES CCMP (Personal/Enterprise)<br>PEAPv0 MSCHAPv2, LEAP, TTLS<br>(supports PrintNet Enterprise and PXML)<br>Coax/Twinax<br>GPIO (General Purpose Input/Output) |

## FONTS, GRAPHICS SUPPORT, WINDOWS DRIVERS

|                 |  |
|-----------------|--|
| Fonts           | OCR-A, OCRB, Courier, Letter Gothic, CG Triumvirate Bold Condensed |
| Character Set   | Unicode with TrueType font support                                 |
| Graphic Support | PCX, BMP and TIFF file formats                                     |
| Windows Drivers | Microsoft Windows NT/2000/XP/Vista/7                               |

## ELECTRICAL REQUIREMENTS

|                       |   |
|-----------------------|---|
| Line Input            | 90-264 VAC (48-62Hz) PFC  |
| Power Consumption     | 150 watts (typical)   |
| Regulatory Compliance | IEC60950-2, EN55022 Class B, EN55024, EN61000-3-2, EN61000-3-3, FCC Part 15 Class B |

## ENVIRONMENTAL FACTORS

|                                |  |
|--------------------------------|--|
| Operating Temperature          | 5°C to 40°C  |
| Dimensions                     | 11.7" W x 20.5" L x 13.0" H (SL5204r/SL5304r)<br>13.4" W x 20.5" L x 13.0" H (SL5206r/SL5306r) |
| Printer Weight/Shipping Weight | 38lbs/47lbs (SL5204r/SL5304r)<br>41lbs/50lbs (SL5206r/SL5306r)                                 |

† Includes RFID commands

†† USA, Canada, & European Union only

Printronix offers a wide selection of RFID label sizes and inlay designs as well as thermal transfer ribbons. To learn more about RFID labels and supplies or to place an order, visit [www.rfid.printronix.com](http://www.rfid.printronix.com) or call 800-733-1900.