



## THERMAL PRINTING TODAY WITH TECHNOLOGY FOR TOMORROW

Based on the 5r Multi-Technology Platform, the ThermoLine™ T5000r™ family is an industrial thermal bar code printer designed to operate in challenging environments. Through **leadership by design**, the T5000r combines reliability, utility, power and flexibility for demanding environments and provides the open migration to RFID for future requirements. The T5000r supports the widest range of connectivity and control without sacrificing performance and provides the ability to meet new application and compliance requirements.

The T5000r integrates real world experience that readily adapts to emerging standards. The T5000r firmware can be upgraded to keep pace with new thermal bar code printing innovations and applications.

## 5r MULTI-TECHNOLOGY PLATFORM *leadership by design*

### SCALABLE

Multiple embedded emulations allow users to standardize on a single printer for environments with mixed printer languages

### INNOVATIVE

Open standard XML based platform for non-proprietary printing, job and printer control

### BEST OF BREED

Aluminum die cast industrial design, ventless cooling, and high performance processor ideal for rugged environments

### BUILT FOR CHANGE

Snap-in print heads allow operators to replace print heads and change resolution without service calls

### SMART READY

Field upgradeability supports future RFID requirements

**RFID**  
((( SMART )))™

### KEY FEATURES

- 32-bit processor for ultra-fast processing and throughput performance
- 32MB SDRAM memory and 8MB Flash with font and image storage capability
- 625m ribbon reduces downtime and supply cost
- Smart Ready design provides the migration path for future RFID implementation
- Embedded Zebra, TEC, Intermec, Sato and Datamax programming language support
- XML forms printing with embedded industry standard forms and templates
- Unicode with TrueType font support for worldwide compliance and local printing requirements
- Printronix Extensible Markup Language (PXML) interface enables real-time printer management and job control

### GUARANTEED BAR CODE QUALITY

The T5000r delivers dependable and reliable bar code printing for compliance labeling and accommodates higher density bar codes, increased graphics or smaller text with snap-in print heads. When used in conjunction with ODV™ technology (Online Data Validation), the T5000r provides verification of scannable bar codes at the point of label creation. All T5000r printers are designed as RFID Ready and can easily be upgraded with Printronix patented MP2™ encoding technology to read and encode UHF RFID Smart Labels. Combining bar code compliance and RFID technology the T5000r links bar code and EPC data together for storage, retrieval, electronic audits and data synchronization.

**PRINTRONIX**  
GLOBAL PRINTING...ENABLED.

**T5000r THERMAL PRINTERS**

T5000r Thermal transfer or direct transfer  
Industrial grade  
RFID field upgradeable

**SLMP2 UPGRADE KIT**

Upgrade the T5000r to RFID with the following upgrade kit:  
- Multi-protocol UHF encoder set to global frequency standards  
- Supports EPCglobal Gen 2 standards  
(Excludes 8" printers T5208r/ T5308r)

**MEMORY**

DRAM 32MB standard  
Flash 8MB standard (16MB optional)

**PRINTING CHARACTERISTICS**

Print Speed T5204r-4": 10 IPS @ 203 dpi (254mm/sec)  
T5304r-4": 8 IPS @ 300 dpi (203mm/sec)  
T5206r-6": 10 IPS @ 203 dpi (254mm/sec)  
T5306r-6": 8 IPS @ 300 dpi (203mm/sec)  
T5208r-8": 8 IPS @ 203 dpi (203mm/sec)  
T5308r-8": 6 IPS @ 300 dpi (152mm/sec)

Printing Methods Thermal transfer or direct thermal  
Resolution 203/300 dpi (operator interchangeable)

Printable Width 4.1" max (104mm) (T5204r/T5304r)  
6.6" max (168mm) (T5206r/T5306r)  
8.5" max (216mm) (T5208r/T5308r)

**MEDIA COMPATIBILITY**

Media Types Roll or fanfold  
Labels, tags and tickets  
Paper, film or synthetic stock  
Thermal Transfer or Direct Thermal

Media Width 1.0" to 4.5" (T5204r/T5304r)  
2.0" to 6.8" (T5206r/T5306r)  
3.0" to 8.75" (T5208r/T5308r)

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" (T5204r/T5304r)  
2.0" to 6.8" (T5206r/T5306r)  
3.0" to 8.75" (T5208r/T5308r)

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  
(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  
Compatible with RFID encoding

**PROGRAMMING LANGUAGES**

Standard Printronix Graphics Language (PGL)†  
Zebra Graphics Language (ZGL)†  
TEC Graphics Language (TGL)  
Intermec Graphics Language (IGL)  
Sato Graphics Language (STGL)†  
Datamax Graphics Language (DGL)  
IER Siège® Graphic Language (IEGL)  
Monarch Graphic Language (MGL)  
XML – Extensible Mark-up Language  
IPDS over Ethernet, Twinax or Coax

Optional

**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), DATAMATRIX, EAN8, EAN13, FIM, I-2/5, German I-2/5, IMB, Interleaved 2/5, ITF14, Matrix, MAXICODE, MSI, PDF417, PLANET, PLESSEY, POSTNET, POSTBAR, ROYALBAR, RSS14, TELEPEN, UCC/EAN-128, UPC-A, UPC-E, UPC-E0, UPCSHIP, UPS11

**SENSING METHODS**

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

**INTERFACES**

Standard RS232 Serial  
IEEE 1284 (Centronics)  
USB 2.0

Optional Ethernet (supports PrintNet Enterprise and PXML)  
Wireless (802.11b/g, 54mbps)††  
128bit WEP  
WPA-PSK / TKIP (Personal)  
WPA2-PSK / AES CCMP (Personal/Enterprise)  
PEAPv0 MSCHAPv2, LEAP, TTLS  
(supports PrintNet Enterprise and PXML)  
Coax/Twinax  
GPIO (General Purpose Input/Output)

**FONTS, GRAPHICS SUPPORT, WINDOWS DRIVERS**

Fonts OCRA, OCRB, Courier, Letter Gothic, CG Times, CG Triumvirate, CG Triumvirate Bold, 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

**ELECTRICAL REQUIREMENTS**

Line Input 90-264 VAC (48-62Hz) PFC  
Power Consumption 150 watts (typical)  
Regulatory Compliance FCC-B, UL, CSA, ETSI EN 300 220, CE

**ENVIRONMENTAL FACTORS**

Operating Temperature 5°C to 40°C

Dimensions 11.7" W x 20.5" L x 13.0" H (T5204r/T5304r)  
13.4" W x 20.5" L x 13.0" H (T5206r/T5306r)  
15.4" W x 20.5" L x 13.0" H (T5208r/T5308r)

Printer Weight/Shipping Weight 37lbs/46lbs (T5204r/T5304r)  
40lbs/49lbs (T5206r/T5306r)  
43lbs/52lbs (T5208r/T5308r)

† 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.primtronix.com](http://www.rfid.primtronix.com) or call 800-733-1900.

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