



105SLPlus™ PRINTER SPECIFICATIONS

Specifications are provided for reference and are based on printer tests using Zebra brand ribbons and labels. Results may vary in actual application settings or when using other than recommended Zebra supplies. Zebra recommends always qualifying any application with thorough testing.

Standard Features

Physical Features

- Full-function front panel and large multilingual back-lit LCD display — with user-programmable password protection
- Thin film printhead — with E³ Element Energy Control
- 8 MB Flash memory — including 2.0 MB user-available non-volatile memory storage for downloadable objects
- Serial RS-232 and bi-directional parallel ports — with auto detect
- USB 2.0 port
- Dual media sensors — transmissive and reflective, selectable through software or front panel
- Internal ZebraNet 10/100 Print Server — supports 10Base-T, 100Base-TX, and fast Ethernet 10/100 auto-switching networks.

Firmware

- ZPL® or ZPL II® programming language — selectable through software or front panel
- XML Enabled Printing — allows XML communications for barcode label printing, eliminating license fees and printer server hardware and lowering customization and programming costs

Printer Operation

- 32 bit 133 MHz RISC processor
- 16 MB SDRAM memory (12 MB user-available)
- Internal real-time clock
- Advanced label/media counters
- Thermal transfer and Direct thermal printing of bar codes, text, and graphics
- Auto calibration—printer calibrates when printer is turned on or when printhead is closed using approximately two labels
- Zebra Universal Printer Driver — for Microsoft® Windows® 2000/XP/Vista operating systems

Optional Features

Printer Options

- Full-width rotary knife cutter and catch tray — operates under software control cutting labels individually or in strips
- Media rewind spindle — rewinds finished roll internally onto 3 in. (76 mm) core or enables label peel and liner rewind
- Flash Memory — factory installed 64 MB (61 MB user available)
- Additional fonts

ZebraNet Print Server Options

Features provided by ZebraNet Print Servers include:

- Web View web pages — connect and control Zebra bar code printers via the printer's web interface using common internet browsers
- Alerts — provide alerts via any e-mail-enabled, wired, or wireless device to minimize downtime
- ZebraNet b/g Print Server
- SEH PS102-Z Internal IPV6 Print Server

ZebraLink Solutions

- ZebraDesigner Pro — an intuitive, easy-to-use software program for creating complex label designs (option).
- ZebraDesigner — offers basic features for simple label design
- ZebraDesigner for myXML — easy-to-use label design software that enables printing on XML enabled printers
- ZebraNet Bridge Enterprise — centrally manage Zebra printers from a computer anywhere on your network.
- ZebraNet Utilities v 7.0 — provides enhanced printing, conversion, and administration capabilities; message management; and more.

Media Specifications

- Media type: continuous, die-cut, or black mark, notch.
- Minimum label length: *
 - Rewind mode: 0.25 in. (6 mm)
 - Peel mode: 0.5 in. (13 mm)
 - Tear-off mode: 0.7 in. (18 mm)
 - Cutter mode: 1.5 in. (38 mm)
- Media thickness (label and liner): 0.003 in. (0.076 mm) to 0.012 in. (0.305 mm)
- 0.009 in max in cutter mode
- Maximum media roll size: 8.0 in. (203 mm) outside diameter on a 3 in. (76 mm) inside diameter core
- Transmissive (gap) sensing standards:
 - Interlabel gap: 2–4 mm, preferably 3 mm
 - Sensing notch: 0.25 in. W (6 mm) × 0.12 in. L (3 mm)
 - Sensing hole: 0.125 in. (3 mm) diameter
- Reflective (black mark) sensing standards:
 - Black mark length (parallel to inside media edge): 0.12 in.–0.43 in. (3–11 mm)
 - Black mark width (perpendicular to inside media edge): 0.43 in. (> 11 mm)
 - Black mark location: within 0.040 in. (1 mm) of inside media edge:
 - Black mark density: >1.0 Optical Density Units (ODU)
 - Maximum media density: 0.5 ODU
- Media width (label and liner): 0.79 in. (20 mm) to 4.5 in. (114 mm)
- Minimum label length: See media specifications on page 2
- Maximum full-width media thickness for cutter: 0.23 mm (0.009 in.)

Electrical Specifications

- Universal power supply with power-factor correction 100-240 VAC, 47–63 Hz
- Agency approvals: IEC 60950-1, EN 55022 Class B, EN 55024, EN 61000-3-2, EN 61000-3-3
- Product Markings: cTUVus, CE, FCC-B, ICES-003, VCCI, C-Tick, NOM, S-Mark(Arg), CCC, GOST-R, BSMI, KCC, and UkrSEPRO

Font Specifications

- Bitmap fonts A through H and GS symbols are expandable up to 10 times, height and width independent
- Smooth scalable font Ø (CG Triumvirate™ Bold Condensed) is expandable dot-by-dot, height and width independent
- IBM Code Page 850 International Characters

Ribbon Specifications

- Standard Lengths: 1476' (450 m) or 984' (300 m)
Provides 2:1 and 3:1 media roll to ribbon ratios
- Maximum ribbon roll size: 3.2 in. (81.3 mm) outside diameter on a 1.0 in. (25.4 mm) inside diameter core
- Ribbon wound coated-side out
- Ribbon width: 0.79 in. (20 mm) to 4.33 in. (110 mm)

Environmental Specifications

- Operating environment:
 - Thermal transfer = 40°F to 105°F (5° to 40°C)
 - Direct thermal = 32°F to 105°F (0° to 40°C)
 - 20% to 85% non-condensing relative humidity
- Storage/Transportation environment: –40°F to 140°F (–40° to 60°C)
5% to 85% non-condensing relative humidity

Communications Specifications

- ZebraNet b/g Print Server — supports advanced wireless securities through an integrated, internal, theft-resistant radio card.
- ZebraNet 10/100 Print Server — supports 10Base-T, 100Base-TX, and fast Ethernet 10/100 auto-switching networks.
- Support for ZebraNet PrintServer II — 10Base-T Ethernet network
- USB 2.0 — 12 Mbits/second
- High-speed bi-directional parallel interface — IEEE 1284-1994 compatibility, ECP, nibble mode.
- High-speed serial interfaces:
 - RS-232C with DB9F connector, optional converter for DB25F available
 - Optional RS-422/485 with multidrop capability to network multiple printers from a single host with external adapter
 - Software (XON/XOFF) or hardware (DTR/DSR) communication handshake protocols

Zebra Programming Language[®] (ZPL and ZPL II)

- Communicates in printable ASCII characters
- Unicode™ - Compliant (Version V53.17 and higher)
- Compatible with mainframe, mini, and PC hosts
- Downloadable objects include graphics, scalable and bitmap fonts, label templates, and formats
- Object copying between memory areas (RAM, Onboard Flash memory locations)
- Adjustable print cache
- Data compression
- Automatic memory allocation for format while printing
- Automatic serialization of fields
- Format inversion (white on black)
- Mirror-image printing
- Four position field rotation (0°, 90°, 180°, 270°)
- Slew command
- Programmable label quantities with print, pause, cut control
- User-programmable password
- Status messages to host on request

Bar Code Symbologies and Specifications

- Bar code ratios: 2:1, 7:3, 5:2, and 3:1
- Linear bar codes: Code 11, Code 39, Code 93, Code 128 with subsets A/B/C and UCC Case Codes, ISBT-128, UPC-A, UPC-E, EAN-8, EAN-13, UPC and EAN 2-or 5-digit extensions, Plessey, Postnet, Standard 2-of-5, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Codabar and Planet Code
- 2-dimensional bar codes: Codablock, PDF417, Code 49, DataMatrix, MaxiCode, QR Code, TLC 39, MicroPDF, RSS-14 (and composite), Aztec

General Specifications

- Power consumption:
 - Idle = 20 W
 - Printing = 121 W (printing pause test label at lowest speed)
 - Standby = 25 W
- Height: 15.5 in. (393.7 mm)
- Width: 10.31 in. (261.9 mm)
- Depth: 20.38 in. (517.5 mm)
- Weight: 50 lbs. (22.7 kg)

* Media registration and minimum label length are affected by media type and width, ribbon type, and print speed. Performance improves as these factors are optimized. Zebra recommends always qualifying any application with thorough testing.

105SLPlus™ 203 dpi

Printing Specifications

- 203 dpi resolution (8 dots/mm)
- Dot size (W × L):
0.0049 in. × 0.0049 in. (0.125 mm × 0.125 mm)
- First dot location measured from inside media edge:
0.14 in. ±0.05 in. (3.5mm ±1.25 mm)
- Maximum print width: 4.0 in. (102 mm)
- Maximum non-continuous media print length (with 16 MB memory):
39 in. (991 mm)
- Maximum continuous media print length (with 16 MB memory):
150 in. (3810 mm)
- Media registration tolerance: *
 - Vertical:
± 0.030 in. (± 0.75 mm)
at print speeds at or below 4 ips on non-continuous media
± 0.060 in. (± 1.5 mm)
at print speeds higher than 4 ips
 - Horizontal:
± 0.060 in. (± 1.5 mm)
- Programmable print speeds
(inches per second):
2.4, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, ~~13~~, ~~14~~
- Bar code modulus “X” dimension:
 - Picket fence (non-rotated) orientation: 4.9 mil to 49 mil
 - Ladder (rotated) orientation:
4.9 mil to 49 mil

105SLPlus™ 300 dpi

Printing Specifications

- 300 dpi resolution (12 dots/mm)
- Dot size (W × L):
0.0033 in. × 0.0039 in.
(0.084 mm × 0.01 mm)
- First dot location measured from inside media edge:
0.08 in. ±0.05 in. (2.1 mm ±1.25 mm)
- Maximum print width: 4.0 in. (102 mm)
- Maximum non-continuous media print length (with 16 MB memory):
39 in. (991 mm)
- Maximum continuous media print length (with 16 MB memory):
100 in. (2540 mm)
- Media registration tolerance: *
 - Vertical:
± 0.030 in. (± 0.75 mm)
at print speeds at or below 4 ips on non-continuous media
± 0.060 in. (± 1.5 mm)
at print speeds higher than 4 ips
 - Horizontal:
± 0.060 in. (± 1.5 mm)
- Programmable print speeds
(inches per second):
2.4, 3, 4, 5, 6, 7, 8, 9, 10, ~~11~~, ~~12~~
- Bar code modulus “X” dimension:
 - Picket fence (non-rotated) orientation: 3.3 mil to 49 mil
 - Ladder (rotated) orientation:
3.9 mil to 39 mil

* Media registration and minimum label length are affected by media type and width, ribbon type, and print speed. Performance improves as these factors are optimized. Zebra recommends always qualifying any application with thorough testing.

Standard Printer Fonts

Fonts A through V are Expandable up to 10 times, height and width independently. Fonts E and H, however are not considered “in-spec” (OCR-A and OCR-B) when expanded.

The scalable smooth font 0 is expandable on a dot-by-dot basis, height and width independent, while maintaining smooth edges. Maximum character size depends on available memory. IBM Code Page 850 international character sets are available in fonts A through G, and 0 through software control.

Font Specifications (203dpi) 8 dot/mm

Font	Matrix (in dots) (H x W)	Type†	Min. Char. Size (H x W) in inches (mm)	Max. CPI
A	9 x 5	U-L-D	0.044 x 0.029 (1.1 x 0.74)	33.9
B	11 x 7	U	0.054 x 0.044 (1.37 x 1.1)	22.6
C, D	18 x 10	U-L-D	0.088 x 0.059 (2.2 x 1.5)	16.9
E	28 x 15	OCR-B	0.138 x 0.098 (3.5 x 2.5)	10.1
F	26 x 13	U-L-D	0.128 x 0.079 (3.3 x 2.0)	12.7
G	60 x 40	U-L-D	0.295 x 0.236 (7.5 x 6.0)	4.2
H	21 x 13	OCR-A	0.103 x 0.093 (2.6 x 2.4)	10.7
GS	24 x 24	SYMBOL	0.118 x 0.118 (3.0 x 3.0)	8.4
P	20 x 18	U-L-D	0.098 x 0.089 (2.50 x 2.25)	N/A
Q	28 x 24	U-L-D	0.138 x 0.113 (3.50 x 3.00)	N/A
R	35 x 31	U-L-D	0.172 x 0.153 (4.38 x 3.88)	N/A
S	40 x 35	U-L-D	0.197 x 0.172 (5.00 x 4.38)	N/A
T	48 x 42	U-L-D	0.236 x 0.207 (6.00 x 5.25)	N/A
U	59 x 53	U-L-D	0.290 x 0.261 (7.38 x 6.63)	N/A
V	80 x 71	U-L-D	0.394 x 0.349 (10.0 x 8.88)	N/A
Ø	variable	U-L-D	variable	N/A

†U—Uppercase L—Lowercase D—Descenders

Font Specifications (300dpi) 12 dot/mm

Font	Matrix (in dots) (H x W)	Type†	Min. Char. Size (H x W) in inches (mm)	Max. CPI
A	9 x 5	U-L-D	0.030 x 0.020 (0.76 x 0.51)	50.0
B	11 x 7	U	0.037 x 0.030 (0.94 x 0.76)	33.3
C, D	18 x 10	U-L-D	0.060 x 0.040 (1.5 x 1.0)	25.0
E	41 x 20	OCR-B	0.137 x 0.087 (3.5 x 2.2)	11.5
F	26 x 13	U-L-D	0.087 x 0.053 (2.2 x 1.3)	18.8
G	60 x 40	U-L-D	0.200 x 0.160 (5.1 x 4.1)	6.3
H	30 x 19	OCR-A	0.100 x 0.093 (2.5 x 2.37)	10.7
GS	24 x 24	SYMBOL	0.080 x 0.080 (2.03 x 2.03)	12.5
P	20 x 18	U-L-D	0.067 x 0.060 (1.69 x 1.52)	N/A
Q	28 x 24	U-L-D	0.093 x 0.080 (2.37 x 2.03)	N/A
R	35 x 31	U-L-D	0.117 x 0.103 (2.96 x 2.62)	N/A
S	40 x 35	U-L-D	0.133 x 0.117 (3.39 x 2.96)	N/A
T	48 x 42	U-L-D	0.160 x 0.140 (4.06 x 3.56)	N/A
U	59 x 53	U-L-D	0.197 x 0.177 (5.00 x 4.49)	N/A
V	80 x 71	U-L-D	0.267 x 0.237 (6.77 x 6.01)	N/A
Ø	variable	U-L-D	variable	N/A

†U—Uppercase L—Lowercase D—Descenders



About BarcodesInc

Who We Are

BarcodesInc is North America's leading provider of barcode and mobile computing solutions. We are a leading provider of barcode and mobile computing solutions. We are a leading provider of barcode and mobile computing solutions.

We Owe Our Success To You

Our success is due to the support and trust of our customers. We are committed to providing the highest quality products and services to our customers.

Why Choose BarcodesInc?

Dedicated Account A UbU Yf

Our Account Managers will not compromise when it comes to providing you top-notch service. Your Account Manager is the primary point of contact for your business and makes it a priority to get to know you, your company and all your needs.

Highly-Trained Technical Support

Our technical staff has the broadest knowledge and every significant certification in the industry. One of our friendly experts is always available to suggest products and solutions for any situation.

Incredible Value

Our purchasing power means big savings for you. Whatever your project, our team will work hard to deliver a solution that fits your budget.

Largest Inventory in the Industry and Same-Day Shipping

Whatever your barcoding, mobile computing, or printing needs, we will fill your order and ship it the same day.

Premier Access to Top Manufacturers

BarcodesInc maintains strong strategic partnerships with the leading manufacturers in barcoding, mobile computing, printing and RFID.

Responsive Customer Service

Every phone call and email is responded to promptly, completely and accurately by our customer service team.

Easy Returns

Damaged, defective or incorrectly ordered goods may be returned without hassle.

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