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ZEBRA LP/TLP 2824 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

- OpenACCESS™ design for easy media loading
- 2.2" print width
- 203 dpi print resolution (8 dots/mm)
- 4 ips maximum print speed
- Direct Thermal (LP) and Direct Thermal/Thermal Transfer (TLP) printing of bar codes, text and graphics
- EPL2 programming language and Line Mode support (LP only)
- 512KB of flash memory
- 128KB SRAM – enables printing of up to 11" long labels
- Serial RS232 (DB9) and USB (V 1.1) OR Parallel (with Centronics connector) interfaces – configurable at time of order
- Head-up sensor
- Reflective and transmissive media sensing
- Metal tear edge
- 5" outside diameter media capability
- Fan-fold media feed slot
- 5 resident expandable bitmap fonts (USA, European)
- Multiple DOS and Windows codepage support
- Windows drivers
- Printer utilities
- Linear & 2-D bar code symbologies

Optional Features

- **Additional Flash memory** – for a total of 1MB for increase storage of forms, fonts, and graphics
- **Additional SRAM memory** – for a total of 256KB for printing up to 22" long labels
- **Label Dispenser** - label peel and present with label taken sensor
- **Liner-free Platen** (LP only) – for use with liner-free media
- **Cutter** – may be used on the following media types with a maximum thickness of 0.007" (0.18mm) and minimum label length of 1.0" (25.4mm):
 - **Continuous Paper** – most receipt or fax paper is generally acceptable
 - **Label Liner** – cuts on the liner only. Cutter should not be used to cut through labels as adhesives may cause jams
 - **Tag Stock** – tag stock is generally acceptable as long as it is no more than 0.007" (0.18mm) thickness
- **Internal ZebraNet PrintServer II** – enables Ethernet 10Base-T network printing

- **Internal Real Time Clock** – date/time for standalone applications
- **Asian Font Set** – Japanese, Korean, or Simplified Chinese

Accessories

- **Media Adapter Guide** – supports wristband media (LP only)
- **USB Adapter** (parallel units only)
- **External Rewinder** – allows rewinding of labels to be applied later or liner only in peel and present mode
- **KDU** - Keyboard Display Unit (Serial units only) provides a data-entry terminal for standalone applications
- **External ZebraNet PrintServer II** (Ethernet 10Base-T adapter for parallel units only)

ZebraLink Solutions

Software

ZebraDesigner Pro – An intuitive, easy-to-use software program for creating complex label designs (option).

ZebraDesigner – Offers basic features for simple label design

ZebraNet Utilities v 7.0 – Provides enhanced printing, conversion, and administration capabilities; message management; and more.

Zebra Universal Driver – The most powerful driver available from Zebra.

Networking Options

ZebraNet PrintServer II (internal or external)

Firmware

EPL II – Eltron Programming Language

Media Specifications

- Media Width: 1.00" (25.4mm) – 2.36" (60mm)
- Media Width w/ 2" Media Adapter Guide: 0.585" (15mm) – 1.44" (37mm)
- Label Length:
 - Minimum - 0.38" (9.7mm)
 - Minimum with label taken sensor used - 0.75" (19mm)
 - Minimum with cutter - 1.0" (25.4mm)
 - Maximum with standard memory – 11.00" (279mm)
 - Maximum with optional memory - 22.00" (584mm)
- Core Diameter - 1.00" (25.4mm), 1.5" (38mm)
- Max Roll Diameter - 5.00" (127mm)
- Media Thickness - 0.003" (0.08mm) - 0.007" (0.18mm)
- Media Sensing - gap, black line, notch

- Media Type:
 - Roll-fed or fan-fold
 - Label stock (die cut or continuous, direct thermal or thermal transfer)
 - Tag stock (die cut or continuous, direct thermal or thermal transfer)
 - Receipt paper (continuous, direct thermal)
 - Wristband stock (direct thermal)
 - Optional liner-free media (direct thermal)

Ribbons/Ribbon System (TLP 2824)

- Ribbon Width: 1.33” (33.8mm) – 2.24” (58mm)
- Ribbon Capacity: 1 roll ribbon per roll media
- Ribbon OD: 1.34” (34mm)
- Core ID: 0.5: (12.7mm)
- Ribbon Length: 244’ (74M) using 0.000328” ribbon thickness
- Ribbon Type: Wax, wax/resin, and resin
- Detection: Ribbon out sensor wheel. Detects when wheel is moving and senses when ribbon is out

Programming

- ASCII EPL2 programming language (Page Mode)
- Field Rotations
- Variable field support (up to 100)
- Counter support (up to 10)
- Variable field addition and subtraction
- Status reporting
- Form, fonts, and graphics storage
- Line Mode (LP only)
- Simple set of formatting commands
- Support of selected bar codes

Font Specifications

Standard bitmap font set

Type	Width	Height	Sp	CPI	Chars
Font1	8	12	2	20.3	160
Font2	10	16	2	16.9	160
Font3	12	20	2	4.5	160
Font4	14	24	2	12.7	160
Font5	32	48	4	5.6	80

- Code pages supported:
 - DOS: 437, 850, 851, 852, 855, 857, 860, 861, 862, 863, 865, 866, 869, 737
 - Windows: 1250, 1251, 1252, 1253, 1254, 1255, 1256, and 1257
- Soft fonts can be downloaded and stored in the flash

Bar Codes

- **Linear bar codes:** Code 39, Code 128A, B & C (User selectable/Auto), UCC/EAN-128, Code 93, Codabar, Interleaved 2 of 5, UPC-A, UPC-E, UPC-A with 2 and 5 add on, UPC-E with 2 and 5 add on, EAN 13, EAN 8, EAN 13 with 2 and 5 add on, EAN 8 with 2 and 5 add on, Postnet (5, 9, 11, & 13 digit) Japanese Postnet, Plessey (MSI-1), MSI-3, German Post Code, RSS-14 (limited, truncated, stacked) (downloadable)
- **2-dimensional bar codes:** Maxicode (modes 2,3,4,6), PDF417 (MicroPDF417 and MacroPDF417), QR Code (optional – with Asian Font Set only), Data Matrix (downloadable)

Interface/Connectivity Types

- Serial- RS232:
 - Software selectable
 - baud rate (default 9600)
 - parity (default none)
 - data length (default 8)
 - stop bit (default 1)
 - Flow control – hardware and software
 - Connector:
 - DB-9 Type: 9 pin D Sub connector female (standard)
 - Includes +5 VDC- 160 mA power output capability
- Parallel:
 - Centronics
 - Connector: 36 Pin
 - Includes +5VDC –300mA power output capability
- USB:
 - Version 1.1, bi-directional
 - Supported in Win98 and Win98SE, Win Me and Windows 2000 platforms
 - Connector – Type B Female
- Internal Ethernet (optional):
 - Zebranet PrintServer II
 - Connector – RJ-45 Female Type

Electrical Specifications

- Auto-ranging external power supply with C7 type connector
- Output: 20 VDC, 2.5A
- Input: 100-240 VAC, 50-60 Hz

Agency Approvals: FCC, CE, VCCI/PSE, C-TICK, CB, UL, CCC/SRRC, NOM, CSA, GOST-R

Physical Specifications

	LP 2824	TLP 2824
Height:	6.8” (173mm)	7.0” (178mm)
Width:	3.6” (91mm)	5.5” (140mm)
Depth:	7.5” (191mm)	9.5” (241mm)
Weight:	2.7lbs (1.2kg)	3.5lbs (1.6 kg)
Shipping Weight:	5.3lbs (2.4kg)	6.1bs (2.8kg)

Operating Environment

- Temperature: 40°F-105°F
- Humidity: 10%-90% non-condensing

Preventative Maintenance: Zebra recommends cleaning the printer on a regular basis using standard Zebra cleaning supplies. Refer to the User’s Guide for more details.

Cleaning: The exterior is cleaned with a lint-free cloth, and if necessary, a mild detergent solution or desktop cleaner can be used. Interior components (printhead, platen, media path, and dispenser bar) are cleaned with alcohol or blown air.

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