



Zebra® R2844-Z

RFID Printer/Encoder—Low-Volume Desktop Printing, 13.56 MHz Smart Labels

The smart choice—print and encode data using one advanced solution.

Fulfilling the need for a compact RFID printing solution that can encode smart labels at the point of use, the R2844-Z printer/encoder is one of the most versatile in the industry! Designed for printing and encoding smart media such as wristbands and smart labels, the R2844-Z meets the needs of applications requiring greater processing speed and more connectivity choices—such as standard serial, parallel, and USB ports, and optional internal Ethernet. It also offers the widest range of supported 13.56 MHz RFID transponders, including Philips' I-Code®, Philips' EPC, TI's Tag-it®, Inside Technologies' PicoTag®, and ISO 15693 from Philips, Infineon, and Texas Instruments. Transponder sizes can range from 12 x 28 mm to 90 x 130 mm.

RFID from Your Desktop

The R2844-Z features a programmable print position for flexible transponder placement. With a compact footprint, and a powerful processor that delivers faster print speed, it is the ideal solution for low-volume desktop applications. Because the R2844-Z is flash upgradeable, new RFID protocols can be added as they are developed.

The R2844-Z RFID smart label printer/encoder provides expanded connectivity, superior performance, and the widest range of support for 13.56 MHz RFID transponders, making it ideal for applications in industries that include:

- Healthcare/Pharmaceutical
- Amusement parks/Entertainment venues
- Libraries
- Express parcel delivery



www.rfid.zebra.com

R2844-Z



Specifications at a Glance*



The compact R2844-Z is ideal for low-volume printing/encoding in space-constrained areas.

STANDARD FEATURES

- RFID smart label printing and encoding
- Direct thermal and thermal transfer printing of bar codes, text, and graphics
- OpenACCESS™ design for easy media loading
- Double-walled ABS case construction
- Fully enclosed 5.0" (127 mm) media compartment
- 32 bit RISC processor
- Zebra E³® Printhead Energy Control
- Auto-calibration
- Auto-switching 120 V and 240 V power supply
- Head-up sensor
- ZebraLink™—Real-time connectivity control solution:
 - WebView/Alert—requires optional ZebraNet® PrintServer II
 - ZBI™—programming language interpreter for translation of foreign data streams

PRINTER SPECIFICATIONS

- Resolution**
203 dpi/8 dots per mm
- Memory**
Standard 8 MB SDRAM (4 MB available for user); 4 MB Flash (2.75 available to user)
Optional: Up to 8 MB Flash with real-time clock (12 MB total)
- Print width**
4.09"/104 mm
- Print length**
39"/990 mm
- Print speed**
Programmable print speeds of 2"/51 mm, 3"/76 mm, and 4"/102 mm per second
- Media Sensors**
Transmissive and reflective

MEDIA CHARACTERISTICS SMART LABELS

- Maximum label and liner length**
39"/990 mm
 - Maximum label and liner width**
4.25"/108 mm
 - Maximum roll diameter**
5"/127 mm O.D. on a 1"/25.4 mm I.D. core
 - Core diameter**
1"/25.4 mm to 1.5"/38 mm
Using media adaptor plates (included):
2.0"/50.8 mm, 2.5"/63.5 mm and 3.0"/76.2 mm
 - Media thickness**
.003"/.08 mm to .0075"/.19 mm
 - Media types**
Roll-fed or fanfold, die cut or continuous direct thermal labels with or without black mark, tag stock
- For optimum print quality and performance, use Genuine Zebra Supplies

RIBBON CHARACTERISTICS

- Outside diameter**
1.36"/35 mm
- Standard length**
244'/74 m using .000328" ribbon thickness
- Width**
1.30"/33 mm to 4.30"/110 mm
- Ribbon setup**
Ribbon wound ink side out
- Core I.D.**
0.5"/13 mm

OPERATING CHARACTERISTICS

- Environmental**
Operating temperature 40° F/5° C to 105° F/41° C
Storage temperature -40° F/-40° C to 140° F/60° C
Operating humidity 10% to 90% non-condensing R.H.
Storage humidity 5% to 95% non-condensing R.H.
- Electrical**
Auto-detectable (PFC Compliant) 100-240 VAC, 50-60 Hz
- Agency approvals**
Emissions: FCC Part 15, Subpart C, C-Tick
Emissions and Susceptibility: (CE): ETSI 300 330-2, ETSI EN 301-489-3, EN55022 Class-B, EN61000-3-2, EN61000-3-3 and EN55024
Safety: CB Scheme IEC 60950:1991 +A1 +A2 +A3 +A4, UL 60950 and C-UL

PHYSICAL CHARACTERISTICS

- Width: 7.9"/201 mm
- Height: 6.8"/172 mm
- Depth: 9.75"/248 mm
- Weight: 3.2 lbs/ 1.4 kg

RELATED PRODUCTS

- Options**
8 MB Flash memory with real-time clock for a total of 12 MB (10.75 MB available to user) for applications.
- Accessories**
Dispenser—Label peel and present with label taken sensor
- Software**
ZebraNet Print Server II (internal and external)

COMMUNICATION AND INTERFACE CAPABILITIES

- Centronics® parallel (36 pin) connector ports
- RS-232 serial interface
- USB v1.1
- Optional internal Ethernet (ZebraNet Print Server II)

PROGRAMMING LANGUAGES

- Core programming languages ZPL® & ZPL II®—universal language for Zebra Printers
- ZBI—works with ZPL to control and interpret text and data streams from peripherals and non-ZPL printer programming languages.
- Transmits captured data over LAN or WAN via e-mail or TCP/IP messaging.

BAR CODES/SYMBOLOLOGIES

- Linear Bar Codes**
Codabar, Code 11, Code 39, Code 93, Code 128, UPC-A, UPC-E, EAN-8, EAN-13, EAN-14, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Plessey, Postnet, Standard 2-of-5, UPC-A and UPC-E with EAN 2 or 5 digit extensions
- 2-Dimensional**
Codablock, Code 49, Data Matrix, MaxiCode, MicroPDF417, PDF417, PlanetCode, QR Code, RSS, TLC 39

FONTS AND GRAPHICS

- Fonts and Character Sets**
Standard Fonts: 16 bitmapped, 1 smooth scalable (CG Triumvirate™ Bold Condensed)
Supports user-defined fonts and graphics—including custom logos
IBM Code Page 850 International Characters
- Graphic Features**
Supports user-defined fonts and graphics—including custom logos

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