Zebra® RZ™ Series

RFID Industrial/Commercial Printer/Encoders

The RZ400™ and RZ600™ printer/encoders bring UHF RFID capabilities to Zebra's popular Z Series® platform and set the new standard as the price-performance leaders in RFID smart labeling. Newly enhanced, they can print/encode small labels for today's closed-loop item-level tracking applications, as well as help meet global RFID tagging compliance initiatives. These metal printer/encoders offer EPC UHF Gen 2, Class 1 support; high-speed print throughput; and rugged reliability to enhance productivity in tough environments.

Better Connected for a Connected World

The RZ series RFID printer/encoders connect easily with most warehouse/manufacturing and business applications. The RZ400 and RZ600 are better connected to your network—through USB 2.0, 802.11b/g secure wireless, or Ethernet. They're better connected to your applications—with multiple RFID power settings to adjust to current and future RFID protocols, transponder designs and sizes; choice of print resolution including 300 dpi; and XML-Enabled printing as a standard feature. And they're better connected to your needs—with easy setup via a large, easy-to-read front panel that includes Asian-language support; easy loading of supplies; and easy maintenance with quick-changing printheads and platens.

The industrial/commercial RZ400 (for smart labels up to 4 inches) and the RZ600 (for up to 6-inch smart labels) have been designed for item-, case- and pallet-level identification. Streamline business-improvement and supply-chain management applications such as:

- Item-level tracking for package verification, work in process, product authentication, document tracking and more
- Asset Tracking
- Inventory Management
- Shipping/Receiving
- Distribution

Standard Features

- Integrated UHF Reader/Encoder
- EPC Gen 2 Class 1/ ISO 18000-6C
- Supports wide range of transponder placements beginning at 15 mm
- Full range of RFID power settings
- RFID processes optimized for fastest label throughput
- RFID counters keep track of the good and unusable labels
- Variable RFID power settings for both read and write allow maximum flexibility for printing small labels
- 32 bit 133 MHz RISC processor
- Zebra printer driver for Windows® 3.X and 95/98/ NT/2000/XP/2003 operating systems
- Advanced label/media counters
- Print methods: Thermal transfer or direct thermal
- Construction: Die-cast aluminum base, frame and printhead mechanism
- Metal media cover with large clear window
- Element Energy Equalizer™ (E³™) for superior print quality
- Auto-calibration
- Real-time clock
- Auto-ranging (90–265 VAC) power supply
- Color-coded operator cues
- Multi-language control panel with back-lit
- 240 x 128 pixel display
- ZPL II®
- XML-Enabled printing—Direct-connect integration for bar code label printing that eliminates license fees and print server hardware, and lowers customization and programming costs

Printer Specifications

Resolution
203 dpi/8 dots per mm; 300 dpi/12 dots per mm; 600 dpi/24 dots per mm (RZ400 only)

Memory
- Standard: 8 MB Flash, 16 MB DRAM
- Optional: Factory Installed 64 MB Flash

Print Width
- RZ400: 4.09"/104 mm
- RZ600: 6.6"/168 mm

Print Length
- RZ400: with 203 dpi: 157"/3,988 mm; with 300 dpi 73"/1,854 mm;
- RZ600: with 203 dpi: 102"/2,590 mm; with 300 dpi 45"/1,143 mm

Print Speed
- 203 dpi: 10"/254 mm per second;
- 300 dpi: 8"/203 mm per second;

Media Sensors
- Fixed reflective sensor
- Adjustable transmissive sensor

Media Characteristics

Maximum label and liner length
Maximum non-continuous: 39"/991 mm

Maximum label and liner width
- RZ400: 4.5"/114 mm
- RZ600: 7.0"/178 mm

Maximum roll diameter
8.0"/203 mm

Core diameter
3"/76 mm

Media thickness
0.0023"/0.058 mm to 0.010"/.25 mm

Media types
Continuous, die-cut, tags, black-mark

Ribbon Characteristics

Outside diameter
3.2"/81.3 mm

Standard length
984'/300 m or 1476'/450 m

Ratio
3:1 media roll to ribbon. Ribbon must be at least as wide as media

Width
- RZ400: 2.00"/51 mm to 4.33"/110 mm
- RZ600: 2.00"/51 mm to 6.85"/174 mm

Ribbon setup
Ribbon wound ink-side out (ribbon wound ink-side in can be used with optional ribbon spindle on RZ400)

Core I.D.
1.0"/25.4 mm

Operating Characteristics

Environmental
- Operating temperature:
  32º F/0º C to 104º F/40º C (Direct Thermal)
  40º F/5º C to 104º F/40º C (Thermal Transfer)
- Storage temperature:
  -40º F/-40º C to 140º F/60º C
- Operating humidity: 20-85% non-condensing
- Storage humidity: 5-85% non-condensing

Electrical
Universal auto-ranging (PFC-compliant) power supply 90-265 VAC; 48-62Hz

Agency Approvals
- FCC subpart B & C, IC RSS 210, IEC 60950-1, EN 300 220, EN 55022 Class B, EN55024, EN 61000-3-2, EN 61000-3-3.
- Markings: cTUVus, CE, FCC-B, ICES-003, C-Tick, CNC, SUBTEL, CCC, SRRC, WPC, KCC, NOM-NYCE, COFETEL, SIRIM, OFTA, MTC, iDA, NCC, NTC

Physical Characteristics

- Width: 10.9"/278 mm
- Height: 13.3"/338 mm
- Depth: 18.7"/475 mm
- Weight: 32.4 lbs/15 kg
- Shipping weight: 49 lbs/22 kg

ZebraLink™ Solutions

Software
- ZebraDesigner™ Pro
- ZebraDesigner for XML
- ZebraDesigner Label Design Software
- ZebraNet™ Bridge Enterprise
- ZebraNet Utilities v 7.0
- Zebra Universal Driver
- ZBI-Developer™
- Additional scalable and bitmapped fonts available

Networking/Connectivity
- ZebraNet Wireless Plus
- ZebraNet 10/100 Print Server
- RS-232C serial port
- High-speed, IEEE1284, bi-directional parallel
- interface
- USB 2.0

Firmware
- ZPL II®
- XML-Enabled Printing
- Web View
- Alert
- ZBI 2.0™

Fonts/Graphics/Symbologies

Fonts and Character Sets
- 7 bitmapped, 1 smooth scalable
- Native open type font support
- Global Printing—Unicode™ compliant
- Contains UFST® from Monotype Imaging Inc.

Graphic Features
- Supports user-defined fonts and graphics—including custom logos
- ZPL II drawing commands—for boxes and lines

Bar Code Symbologies
- Linear Bar Codes: Code 11, Code16k, Code 39, Code 93, Code 128 with subsets A/B/C and UCC Case C Codes, 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, Planet Code
- 2-Dimensional: Codablock, PDF417, Code 49, Data Matrix, MaxiCode, QR Code, MicroPDF417, TLC 39, GS1 DataBar (RSS), Aztec

Options and Accessories

- Factory installed 64 MB Flash memory option
- Cutter with catch tray
- Peel—a front mount, passive peel option with no liner take-up
- Liner take-up (works with peel option)—full roll liner take-up spindle (fits standard base, RZ400 only)
- Rewind—internally rewinds full label roll on 3" core (comes with taller, non-standard printer base)
- RS-422/485 serial port adapter
- Optional ribbon spindle to support ribbon wound ink-side in (RZ400 only)