Zebra® RZ™ series printers

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 meeting the needs of today's global RFID-tagging compliance initiatives. These metal printer/encoders offer EPC Gen 2 support, high-speed print throughput and rugged reliability to enhance productivity in tough environments and lower duty-cycle applications.

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 300dpi and XML-enabled printing as a standard feature.

Also 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.

Key features

- Optimised RFID for fastest label throughput
- Variable RFID power settings for flexibility
- Secure 802.11b/g wireless

Ideal for

- Case- and pallet-level identification
- Asset-tracking and inventory management
- Work in progress
- Shipping/receiving
- Distribution

Specifications at a glance*

Standard features

- Integrated UHF reader/encoder
- EPC Gen 2/ISO 18000-6C
- Full range of RFID power settings
- RFID processes optimised 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 133MHz RISC processor
- Zebra printer driver for Windows® 2000/XP/2003/2008/Vista/7 operating systems
- Advanced label/media counters
- Print methods: thermal transfer or direct thermal
- Construction: die-cast aluminium 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 (90–265VAC) power supply
- Colour-coded operator cues
- Multi-language control panel with backlit 240x128-pixel display
- ZPL II®
- XML-enabled printing – direct-connect integration for bar code label printing that eliminates licence fees and print-server hardware and lowers customisation and programming costs

Printer specifications

Resolution
- 8 dots per mm/203dpi; 12 dots per mm/300dpi

Memory
- Standard: 8MB flash, 16MB DRAM
- Optional: factory-installed 64MB flash

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

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

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

Media sensors
- Fixed reflective sensor
- Adjustable transmissive sensor

Media characteristics

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

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

Maximum roll diameter
- 203mm/8.0"

Core diameter
- 76mm/3"

Media thickness
- 0.058mm/0.0023" to 0.25mm/0.010"

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

Ribbon characteristics

Outside diameter
- 81.3mm/3.2"

Standard length
- 300m/984' or 450m/1,476'

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

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

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

Core I.D.
- 25.4mm/1.0"

Operating characteristics

Environmental
Operating temperature:
- 0ºC to 40ºC/32ºF to 104ºF (direct thermal)
- 5ºC to 40ºC/40ºF to 104ºF (thermal transfer)

Storage temperature:
- -40ºC to 60ºC/-40ºF to 140ºF

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, EN 55024, EN 61000-3-2, EN 61000-3-3
- Markings: cTÜVus, CE, FCC-B, ICES-003, C-Tick

Physical characteristics

Width
- 278mm/10.9"

Height
- 338mm/13.3"

Depth
- 475mm/18.7"

Weight
- 15kg/32.4lb

Shipping weight
- 22kg/49lb

ZebraLink™ Solutions

Software
- ZebraDesigner™ Pro
- ZebraDesigner for XML
- ZebraDesigner label design software
- ZebraNet™ Bridge Enterprise
- ZebraNet Utilities v7.0
- Zebra 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 IEEE 1284 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
- Seven bitmapped, one smooth-scalable
- Native OpenType® 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: Codabar, Code 11, Code 39, Code 93, Code 128 with subsets A/B/C and UCC Case C Codes, EAN-8, EAN-13, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Planet Code, Plessey, Postnet, Standard 2-of-5, UPC-A, UPC-E, UPC and EAN 2 or 5 digit extensions
- Two-dimensional: Aztec Code, Codablock, Code 16K, Code 49, Data Matrix, GS1 DataBar (RSS), MaxiCode, MicroPDF417, PDF417, QR Code, TLC 39

Options and accessories

- Factory-installed 64MB 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 76mm/3" core (comes with taller, non-standard printer base)
- RS-422/RS-485 serial port adaptor