# ZEBRA

## **ZT400 Series RFID Industrial Printers/Encoders**

#### PROVEN DURABILITY WITH UHF RFID ENCODING

Pairing rugged quality with UHF RFID capabilities, the ZT400™ Series printers/encoders help keep your critical operations running efficiently. Known as price-performance leaders in RFID labeling, the ZT400 Series RFID supports a broad range of applications across several industries. Featuring Zebra's Link-OS® environment with powerful software applications, these printers are easy to integrate, manage and maintain from any location around the globe. ZT400 Series RFID printers deliver greater tracking abilities, deeper visibility and enterprise insights in an ever-competitive business environment.





ZT420™

Factory- or field-installable UHF RFID encoder enables greater tracking abilities, deeper visibility and enterprise insights.



#### **Zebra OneCare Services**

Increase printer uptime, and reduce lost productivity and unbudgeted repair costs, by selecting a Zebra OneCare™ service agreement. A cost-effective means of planning and budgeting your annual maintenance expenditures, your agreement ensures that trained Zebra technicians will bring your printer back to factory specifications. Zebra offers a variety of plans to fit your budget and business needs.

#### **Genuine Zebra Supplies**

Ensure consistent print quality, reduce downtime and increase productivity in your printing process with Genuine Zebra™ supplies. We manufacture each supplies product with the exact same materials every time so you always get crisp, readable and scannable output without needing to adjust the printer darkness setting between rolls.

## The Features You Need to Print and Encode With Ease.

Optimized to accurately and efficiently print and encode labels for today's item-level tracking applications, the ZT400 Series RFID gives you enhanced visibility. Adaptive encoding technology allows for excellent media flexibility and simple RFID calibration, eliminating complex placement guidelines. And, Zebra® has globally certified its RFID technology on six continents to support deployments across complex, multinational supply chains.

#### Simple to Integrate. Easy to Manage.

Reduce setup time with the printers' intuitive menu and user interface. Benefit from Zebra's Link-OS environment featuring powerful software applications like Cloud Connect, which enables these printers to connect to the Cloud directly and securely, forwarding data from any port. With the Link-OS Print Touch™ app, you can pair ZT400 Series RFID printers to NFC-enabled devices with a simple tap, giving you immediate access to the data you need, including Zebra® how-to videos and product support.

#### Loaded with Features—Even for High-resolution Applications.

The ZT400 Series RFID features an all-metal frame for rugged reliability to enhance productivity in extreme environments. When RFID-enabled, the 4-inch ZT410™ and 6-inch ZT420™ can print and encode labels as small as 0.6"/16 mm. And, the ZT410 can print up to 600 dpi with precise registration for small-label applications. "Made for iPod®/iPhone®/iPad®" certified, these printers also support Android™ and Windows® devices via Multiplatform SDK apps. ENERGY STAR® qualified, they save you money throughout their lifecycle.

#### **Evolves With Your Business Needs.**

Backward compatible with Zebra's RZ™ Series printers/encoders, replacing or adding to an existing portfolio of RFID-enabled printers is easy with multiple standard connectivity options including Serial, USB 2.0, Bluetooth® and 10/100 Ethernet, as well as optional 802.11 a/b/g/n secure wireless and Parallel. Two open media slots allow users to utilize non-standard connectivity options, design failover connections and provide for future protocols as technology evolves.

#### Silverline Solution Enables Metal Asset Tagging.

In partnership with Confidex, Zebra offers a custom version of the ZT410. This Silverline Solution enables users to print and encode Silverline labels that are designed to work on a variety of surfaces including liquid bottles and metallic cylinders that in the past presented difficulties for RFID applications.









For more information about ZT400 Series RFID Industrial Printers / Encoders, visit www.zebra.com/zt400 or access our global contact directory at www.zebra.com/contact

### **ZT400 Series RFID Specifications**

- Integrated RFID system is user-upgradable in the field
- Prints and encodes tags with a minimum pitch of 0.6"/16 mm
- Supports tags compatible with: UHF EPC Gen 2 V2, ISO/IEC 18000-63 and RAIN RFID protocols
- Compliant with Global RFID radio to support multinational deployments
- · Automatically eliminate complex RFID placement guidelines with adaptive encoding technology
- · Variable inlay placement supports a range of inlay positions for maximum
- Track performance with RFID job-monitoring tools
- Support for industry standard multi-vendor chip-based serialization (MCS)
- Supports block permalocking of user memory compatible with ATA Spec 2000
- · Integrated ThingMagic® RFID reader/encoder

#### **STANDARD FEATURES**

- · Print Methods: Thermal transfer and direct thermal
- Construction: Metal frame and bi-fold metal media cover with enlarged clear viewing window
- Side-loading supplies path for simplified media and ribbon loading
- Thin film printhead with  $E_3$ <sup>™</sup> Element Energy<sup>™</sup> Equalizer for superior print quality
- Communications: USB 2.0, high-speed, RS-232 Serial, 10/100 Ethernet, Bluetooth 2.1, USB Host
- Back-lit, multiline graphic LCD display with intuitive menu and easy-to-use keypad for quick operation
- Bi-colored status LEDs for quick printer status
- · ENERGY STAR® qualified

#### PRINTER SPECIFICATIONS

| Resolution              | 203 dpi/8 dots per mm<br>300 dpi/12 dots per mm (optional)<br>600 dpi/24 dots per mm (optional for ZT410 only) |  |
|-------------------------|--|--|
| Memory                  | 256 MB SDRAM memory<br>512 MB on-board linear Flash memory   |  |
| Maximum Print<br>Width  | ZT410: 4.09"/104 mm<br>ZT420: 6.6"/168 mm  |  |
| Maximum Print<br>Speed  | ZT410: 14 ips/356 mm per second<br>ZT420: 12 ips/305 mm per second   |  |
| Media Sensors           | Dual media sensors: transmissive and reflective  |  |
| Maximum<br>Print Length | ZT410  |  |
| MEDIA CHADACTERISTICS   |  |  |

#### **MEDIA CHARACTERISTICS**

| Media Width     | ZT410  • 1.00"/25.4 mm to 4.5"/114 mm tear/cutter  • 1.00"/25.4 mm to 4.25"/108 mm peel/rewind  ZT420  • 2.00"/51 mm to 7.0"/178 mm tear/cutter  • 2.00"/51 mm to 6.75"/171 mm peel/rewind |  |
|-----------------|--|--|
| Media Roll Size | 8.0"/203 mm O.D. on a 3"/76 mm I.D. core   |  |
| Thickness       | 0.0023"/0.058 mm to 0.010"/0.25 mm   |  |
| Media Types     | Continuous, die-cut, notch, black-mark   |  |

| RIBBON CHARACTERISTICS (Thermal-transfer option only) |  |  |
|---|--|--|
| Standard Length                                       | 1476'/450 m  |  |
| Width   | ZT410: 2.00"/51 mm to 4.33"/110 mm<br>ZT420: 2.00"/51 mm to 6.85"/174 mm |  |
| Core I.D.   | 1.0"/25.4 mm   |  |

#### **OPERATING CHARACTERISTICS**

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|------------------------|---|--|
| Environmental          | Operating Temperature:  Thermal transfer = 40°F to 104°F/5°C to 40°C  Direct thermal = 32°F to 104°F/0°C to 40°C  |  |
|                        | Operating Humidity: 20% to 85% non-condensing   |  |
|                        | Storage/Transportation Temperature: -40°F to 140°F/-40°C to 60°C  |  |
|                        | Storage Humidity: 5% to 85% non-condensing  |  |
| Electrical             | Auto-detectable (PFC Compliant) 100-240VAC, 50-60Hz, rated at 100 Watts ENERGY STAR qualified   |  |
| Agency Approvals       | IEC 60950, EN 55022 Class B, EN 55024, EN 61000-3-2, EN 61000-3-3  cTUVus, CE Marking, FCC-B, ICES-003, VCCI, C-Tick, NOM, S-Mark (Arg), CCC, CU, BSMI, KCC, SABS, IN-Metro |  |

#### PHYSICAL CHARACTERISTICS

|        | ZT410 closed    | ZT420 closed     |
|--------|-----------------|------------------|
| Length | 19.50"/495 mm   | 19.50"/495 mm    |
| Width  | 10.6"/269 mm    | 13.25"/336.55 mm |
| Height | 12.75"/324 mm   | 12.75"/324 mm    |
| Weight | 36 lb./16.33 Kg | 40 lb./18.14 Kg  |

#### SOFTWARE TOOLS

#### **Link-OS Solutions**

Document Design — Quickly design a customized print solution using your business data and Zebra's intuitive, plug-and-print design tools.

Device Integration — Zebra offers apps and products designed to help you integrate Zebra devices into your existing systems.

**Device Management —** Manage your print operations locally and globally with Zebra's suite of device management tools.

**Developer Tools** — Provides you the tools you need to create your own apps, including documentation, source code, programming languages, templates and more.

Connect and control Zebra barcode printers using ZPL II via the printer's web interface using common web browsers.

#### Alert

Printers equipped with ZebraNet print servers will notify you via any emailenabled, wired, or wireless device to minimize downtime.

#### **FIRMWARE**

**ZBI**  $\mathbf{2.0}^{\scriptscriptstyle{\mathsf{M}}}$  — Optional powerful programming language that lets printers run stand-alone applications, connect to peripherals, and much more. **ZPL**® **and ZPL II**® — Zebra Programming Language provides sophisticated label formatting and printer control and is compatible with all Zebra printers.

#### **BARCODE SYMBOLOGIES**

Linear Barcodes: 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, Planet Code

2D Barcodes: Codablock, PDF417, Code 49, DataMatrix, MaxiCode, QR Code, TLC 39, MicroPDF, RSS-14 (and composite), Aztec

#### **Ideal for These Applications**

#### Manufacturing

- · Item-level tagging
- · Asset tagging
- · Work-in-process
- Product ID / serial numbers
- Packaging labeling
- Receiving / put-away labeling

#### Transportation and Logistics

- Order picking / packing
- · Shipping / receiving
- · Cross-dockina
- · Compliance labeling
- Pallet / asset tagging

#### Retail

- · Back-of-store operations
- · Item-level tagging
- · Distribution centers
- · Security tagging

#### Healthcare

- · Laboratory labeling
- · Specimen labeling
- · Pharmacy labeling
- · Asset management / tagging

## **ZT400 Series RFID Specifications**

#### **FONTS AND GRAPHICS**

16 resident expandable ZPL II bitmap and two resident scalable ZPL fonts

Asian and other international scalable and smooth bitmapped fonts

Unicode: For multi-language printing

 $\label{lem:continuous} Download able \ objects \ include \ graphics, \ scalable \ and \ bitmap \ fonts, \ label \ templates \ and \ formats$ 

IBM Code Page 850 international character sets are available in the fonts A, B, C, D, E, F, G and 0 through software control

Code Page 1250, 1252, 1253, 1254, 1255 Support with font 0  $\,$ 

64 MB user-available non-volatile memory storage for downloadable objects

4 MB user-available SDRAM

#### **OPTIONS AND ACCESSORIES**

#### Communication

- · Parallel (Bi-directional interface)
- Wireless: ZebraNet® Printer Server supports 802.11 a/b/g/n networks via an internally integrated option that enables the use of Webview and Alert features

#### **OPTIONS AND ACCESSORIES (continued)**

#### Media Handling

- Rewind: Internally rewinds a full roll of printed labels on 3" core, or peels and rewinds liner (Factory installed only)
- Peel: Front-mount, passive peel option
- Peel: Liner take-up option additional full-roll liner take-up spindle accommodates standard printer base
- Cutter: Front-mount guillotine cutter and catch tray
- 1" I.D. Core media supply hanger
- Ink-side in ribbon supply spindle

#### **Keyboard Display Unit**

ZKDU™ keyboard display units for stand-alone printing applications

For optimum print quality and printer performance, use Genuine Zebra supplies. Specifications subject to change without notice.

