



# ZT400 Series

## Industrial Label Printers

### Print and encode with ease

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.

### Easy media and ribbon loading

The side-loading supplies path makes loading simpler, faster and more intuitive — even for new users. The color-coded media path guides you on how to thread the media and ribbon through the printer, while lighted paths make it easy to see, even in poorly lit environments.

### Space-saving design for an easier fit

Constructed using a bi-fold door, these printers are designed to easily fit in space-constrained environments. ENERGY STAR® qualified, they save you money throughout their lifecycle.

### Direct connection to your Industrial Ethernet network

With the Network Connect option, you can connect ZT400 printers directly to your Industrial Ethernet network without any additional equipment. This eliminates vulnerability points, improves security and saves man-hours in setup, management and troubleshooting.

### Pair devices and access information at a touch

With the Print Touch™ app, you can pair ZT400 Series printers to NFC-enabled devices with a simple tap. Dynamic QR codes give you immediate access to the data you need, including Zebra how-to videos and product support.

## Easy to Manage

### Zebra Print DNA — transforming printers from the inside

The printer hardware is just the start of what you need to maximize the value of your printers. The ZT400 Series is powered by Link-OS, Zebra's robust printer operating system, and Print DNA, a combination of productivity, management, development and visibility tools. The result is a superior printing experience through better performance, simplified remote manageability and easier integration.

**Easily manage all your printers — all from a single location** With our comprehensive and flexible remote management tools, you can maintain, secure and troubleshoot printers simply and easily, from anywhere, at anytime. With Printer Profile Manager Enterprise, a Print DNA option, you can manage one printer, a group of specific printers or all your printers anywhere in the world. This browser-based solution lets you instantly discover every Link-OS printer on your network — there's no need to manually track down, configure or troubleshoot printers. In addition to optional enterprise remote management tools, we offer a full suite of complimentary deployment utilities to simplify initial setup and configuration.

### Seamless integration with your device management system

Get the simplicity of a single pane of glass to manage all your Zebra devices and printers — including the ZT400 Series RFID. With Print DNA's MDM Connectors, you can easily integrate networked ZT400 printers into your existing AirWatch or SOTI MobiControl device management system.

## Performance You Can Count On

### On-metal RFID option enables metal asset tagging

Zebra offers an optional version of the ZT411 for on-metal RFID tagging. This solution enables users to print and encode on-metal RFID labels such as Silverline that are designed to work on a variety of surfaces including IT assets, tools, equipment, returnable containers and other challenging surfaces. The ZT411 RFID On-metal Solution gives you greater flexibility that is globally available—including simple-to-install, field-upgradeable technology and 300 dpi print quality.

### Rugged durability for demanding applications

You can count on the ZT400 to serve your business for years. Its durable metal frame holds up in the most demanding environments, while a long life coating protects the printheads when printing in direct thermal mode, reducing the need to replace printheads. Ensure optimal print quality with the printhead element out detection feature. Every detail has been carefully designed and tested to deliver maximum uptime over the printer's life.

### Consistently exceptional Zebra Certified Supplies

Printing supplies can impact everything from printhead lifespan to operational efficiency. That's why we design, produce and rigorously pretest our own line of thermal printing supplies to ensure consistent, optimized performance in your Zebra printer. We offer the widest selection of in-stock RFID labels and tags for general purpose, advanced and specialty use applications. In a variety of sizes and materials, using inlays from leading manufacturers. For our On-metal RFID Tagging Solution, we offer four types of Confidex Silverline labels to support any size and application.

### Maximize uptime, business operations and printer visibility with services

You invest in Zebra printers to boost the efficiency of your critical operations. Now, you can ensure predictable performance and eliminate unbudgeted repair expenses with Zebra OneCare. You get unmatched technical support direct from Zebra, as well as comprehensive repair services, including accidental damage and defined repair turn-around times. And Zebra's Support and Visibility Services provide the real-time insight into printer operational information you need to increase printer availability and optimize utilization within your workflows.

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### RFID

- Integrated RFID system is user-upgradable in the field
- Optional field-upgradeable on-metal version available (ZT411 only)
- Prints and encodes tags with a minimum pitch of 0.6 in./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 media flexibility
- 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 printing
- 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 E3™ Element Energy™ Equalizer for superior print quality
- Communications: USB 2.0, high-speed, RS-232 Serial, 10/100 Ethernet, Bluetooth 4.1, Dual USB Host
- 4.3-inch color touch display with intuitive menu for quick operation and settings management
- Bi-colored status LEDs for quick printer status
- ENERGY STAR® qualified

### Physical Characteristics

<b>Dimensions (closed)</b>	ZT411: 19.5 in. L x 10.6 in. W x 12.75 in. H 495 mm L x 269 mm W x 324 mm H
	ZT421: 19.5 in. L x 13.25 in. W x 12.75 in. H 495 mm L x 336 mm W x 324 mm H
<b>Weight</b>	ZT411: 36 lbs./16.33 kg ZT421: 40 lbs./18.14 kg

### Printer Specifications

<b>Resolution</b>	203 dpi/8 dots per mm 300 dpi/12 dots per mm (optional) 600 dpi/24 dots per mm (optional for ZT411 only)
<b>Memory</b>	256 MB SDRAM memory 512 MB on-board linear Flash memory
<b>Maximum Print Width</b>	ZT411: 4.09 in./104 mm ZT421: 6.6 in./168 mm
<b>Maximum Print Speed</b>	ZT411: 14 ips/356 mm per second ZT421: 12 ips/305 mm per second
<b>Media Sensors</b>	Adjustable dual media sensors: Transmissive and reflective
<b>Print Length</b>	ZT411 • 203 dpi: 157 in./3988 mm • 300 dpi: 73 in./1854 mm • 600 dpi: 39 in./991 mm  ZT421 • 203 dpi: 102 in./2591 mm • 300 dpi: 45 in./1143 mm

### Media Characteristics

<b>Maximum Media Width</b>	ZT411 • 1.00 in./25.4 mm to 4.5 in./114 mm tear/cutter • 1.00 in./25.4 mm to 4.25 in./108 mm peel/rewind  ZT421 • 2.00 in./51 mm to 7.0 in./178 mm tear/cutter • 2.00 in./51 mm to 6.75 in./171 mm peel/rewind
<b>Maximum Media Roll Size</b>	8.0 in./203 mm O.D. on a 3 in./76 mm I.D. core
<b>Thickness</b>	0.0023 in./0.058 mm to 0.010 in./0.25 mm On-metal option: up to 0.059 in./1.5 mm
<b>Media Types</b>	Continuous, die-cut, notch, black-mark

### Ribbon Characteristics

<b>Standard Length</b>	1476 ft./450 M
<b>Width</b>	ZT411: 2.00 in./51 mm to 4.33 in./110 mm ZT421: 2.00 in./51 mm to 6.85 in./174 mm

<b>Core I.D.</b>	1.0 in./25 mm
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### Environmental

<b>Operating Temperature</b>	Thermal transfer: 40° F to 104° F/5° C to 40° C Direct thermal: 32° F to 104° F/0° C to 40° C
<b>Storage/Transportation Temperature</b>	-40° F to 140° F/40° C to 60° C
<b>Operating Humidity</b>	20% to 85% non-condensing
<b>Storage Humidity</b>	5% to 85% non-condensing

### Firmware

**ZBI 2.0™** — 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.

**EPL and EPL2™** — Eltron® Programming Language with Line Mode simplifies label formatting and enables format compatibility with legacy applications. (EPL available on 203 dpi models only.)

### Electrical

Auto-detectable (PFC Compliant) 100-240VAC, 50-60Hz  
ENERGY STAR qualified

### Options and Accessories

<b>RFID</b>	• Field-installable on-metal RFID kit available (ZT411 only, not available on the 600 dpi model)
<b>Connectivity</b>	Two open communication slots to add internal cards for: <ul style="list-style-type: none"> <li>• Dual band 802.11ac Wi-Fi and Bluetooth</li> <li>• Parallel (bi-directional interface)</li> <li>• 10/100 Ethernet</li> <li>• Applicator interface</li> </ul>
<b>Media Handling</b>	<ul style="list-style-type: none"> <li>• Rewind: Internally rewinds a full roll of printed labels on 3" core, or peels and rewinds liner (factory installed only)</li> <li>• Peel: Front-mount, passive peel option</li> <li>• Peel: Liner take-up — additional full-roll liner take-up spindle accommodates standard printer base</li> <li>• Cutter: Front mount guillotine cutter and catch tray</li> <li>• 1 in. I.D. Core media supply hanger</li> <li>• Ink-side in ribbon supply spindle</li> </ul>
<b>Keyboard Display Unit</b>	• ZKDU™ keyboard display units for stand-alone printing applications

### The ZT400 Series RFID is ideal in:

#### 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-docking
- 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

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### 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  
 Downloadable 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 O through software control  
 Code Page 1250, 1252, 1253, 1254, 1255 Support with font O  
 64 MB user-available non-volatile memory storage for downloadable objects  
 8 MB user-available SDRAM

### Barcode Symbolologies

**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

**Two Dimensional Barcodes** Codablock, PDF417, Code 49, DataMatrix, MaxiCode, QR Code, TLC 39, MicroPDF, RSS-14 (and composite), Aztec

### Agency Approvals

**Safety** IEC 60950, EN 55022 Class B, EN 55024, EN 61000-3-2, EN 61000-3-3

**Emissions** cTUVus, CE Marking, FCC-B, ICES-003, VCCI, C-Tick, NOM, S-Mark (Arg), CCC, CU, BSMI, KCC, SABS, IN-Metro

### Print DNA Software Solutions

**Development Tools** With faster, easier and smarter integration of Zebra printers with your devices and applications, your Zebra printing solutions are up and running in less time, with less cost.

### Print DNA Software Solutions (Continued)

**Management Tools** Minimize IT effort and maximize IT control with Print DNA management tools — the easy way to add and manage any number of printers, anywhere — from a handful of printers to thousands of printers all around the world.

**Productivity Tools** Reach new levels of productivity with innovations that streamline tasks and workflows, optimize device performance and solve tomorrow's printing problems today

**Visibility Tools** Regardless of whether or not you have an existing Mobile Device Management solution in place, robust visibility tools provide unparalleled insight into printer health, usage and performance.

### Product Warranty

ZT400 Series printers are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit:

### Recommended Services

Zebra OneCare Essential and Select Services maximize the availability and productivity of your devices. Key features include 24/7 technical support, comprehensive coverage, advance replacement and software updates. Optional Support and Visibility Services are available. For more information go to [www.zebra.com/onecare](#). (Note: Service availability may vary by region.)

Features are subject to availability. Specifications are subject to change without notice.

