

# ZT231 Industrial Printer

Smart features. Small investment. Big payoff.

Demands are rising and timelines are shrinking. Do you have the printing capabilities to keep up – without interruption? The ZT231 delivers the winning combination of the right features at the right price, along with the long-lasting quality you expect from Zebra. Fast print speeds, high-resolution print quality, large color touchscreen, future-forward design and more – all in one space-saving footprint. Plus, add optional capabilities like RFID, wireless connectivity and media handling features when you need them. But that's not all. Get built-in intelligence to make your work easier, and unmatched security so nothing stands in your way. That's how Zebra defines value.



## Get More Value with Zebra

### Simple Operation with Smart Features

Reduce training time with the ZT231's easy-to-use 4.3" full-color touchscreen. See status at a glance, access wizards and helpful how-to videos and make changes with the touch of a finger or gloved hand. Seamlessly integrate the ZT231 into your existing network as it is backwards compatible and features Printer Emulations to replace other brands without having to change label formats or rewrite code.

### Make It Easy for Your IT Team

Take advantage of Zebra's robust, ever growing Print DNA™ software suite for added capabilities. Easily configure, troubleshoot and manage your printers onsite or remotely via a web-based dashboard. Compare your printer security settings against best practices and adjust to match your preferences, while protecting your data from vulnerabilities.

### The Smart Choice Now and Later

The benefits of buying a ZT231 don't end at the point of purchase. Expand your printer's capabilities with field-installable upgrades when you need them. Add options such as a cutter or peeler, wireless connectivity or even UHF RFID encoding.

## Built to Perform. Engineered to Endure.

### Don't Compromise on Quality

With a durable metal frame, the ZT231 is ideal for light industrial environments. Print crisp text and barcodes with optional 300 dpi resolution. Advance your label throughput with industry-leading print speeds up to 12 ips at 203 dpi. Be confident knowing you're backed by Zebra, the #1 leader in barcode printing.



**Expect more. More value. More features. More for your budget.**

For more information, please visit [www.zebra.com/zt231](http://www.zebra.com/zt231)

### **Get More Done with Greater Visibility**

The ZT231 includes an all-new architecture to process more jobs at once and evolve with emerging technologies. Onboard analytics and printhead element out detection help you plan maintenance in advance. And, the easy tool-less platen and print head removal makes maintenance easy.

### **Small Footprint, Big Access**

To help you make the most of your workspace, we've engineered the ZT231 with a space-saving, compact design and bi-fold door that reduces the height needed to open your printer. Take the trouble out of media loading with an intuitive design and color-coded cues. Adjustable sensors offer greater media flexibility and the large ribbon roll capacity lets you change media less frequently.

### **Connect Your Way**

Take advantage of a variety of standard connectivity options including USB, Serial, Ethernet and USB Host. Tap to pair and print with compatible mobile devices with the Print Touch tag (NFC). Add a second Ethernet port, 802.11ac or an Applicator port.

### **Get RFID Without Complication**

Incorporate UHF RFID printing and encoding\* for greater visibility and tracking. Get greater media flexibility and simple RFID calibration with Zebra's adaptive encoding technology that eliminates complex placement guidelines.

## **Software That Gives You a Serious Advantage**

### **Update, Troubleshoot and Monitor – All from a Single Location**

With Zebra's Printer Profile Manager Enterprise, part of Print DNA, you can easily manage, secure and troubleshoot your networked printers from any location. And an intuitive browser-based interface lets you see status at a glance, quickly triage issues to minimize downtime and perform updates and maintenance.

### **Unparalleled, Peace-of-Mind Printer Security**

Security risks are real and costly. Endpoints are becoming popular targets – including networked thermal printers. Shield yourself from cyber attacks with Zebra's PrintSecure, part of Print DNA. Easily configure your printers via secure connections, identify vulnerabilities, block unauthorized access and detect events before they happen.

## **Supplies, Service and Support**

### **Zebra Certified Supplies**

Printing supplies provide a digital voice for assets across your supply chain. You rely on them to disseminate critical data throughout your organization. If something goes wrong with your printing supplies, operations are interrupted, productivity suffers and costs rise. That's why we design, produce and rigorously pretest our own line of labels and tags to ensure consistent, optimized performance in your Zebra printer. For industry-leading quality, service and thermal printing expertise, choose Zebra Certified Supplies.

### **Backed by Zebra's Worldwide Service and Support**

Access repair support services anywhere around the globe through Zebra and its trusted network of more than 10,000 partners. Zebra OneCare™ Maintenance Plans provide enhanced coverage that exceeds standard warranty.

# Specifications

## Standard Features

- Print methods: direct-thermal or thermal-transfer
- Construction: metal frame and metal enclosures
- Bi-fold media door with large clear window
- Side-loading supplies path for simplified media and ribbon loading
- Thin film printhead with E3™ Element Energy™ Equalizer for superior print quality
- Three-color LEDs for quick printer status
- 4.3" color resistive touch screen with intuitive menu for quick operation and settings
- Communications: USB 2.0, RS-232 Serial port, 10/100 Ethernet, and USB Host
- ENERGY STAR™ certified
- Bluetooth Low Energy (BTLE) technology for enhanced location precision
- ZebraDesigner Essentials – easy label design tool free at [www.zebra.com/zebradesigner](http://www.zebra.com/zebradesigner)
- Real-Time Clock (RTC)

## Physical Characteristics

|             |                                                                                                                                                                                          |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dimensions* | ZT231 Closed: 17 in. L x 9.5 in. W x 11 in. H<br>432 mm L x 241 mm W x 279 mm H<br>ZT231 with Liner Takeup Unit:<br>17 in. L x 9.5 in. W x 12.75 in. H<br>432 mm L x 241 mm W x 324 mm H |
| Weight      | ZT231: 20 lbs./9.1 kg<br>ZT231 with Liner Takeup Unit: 24 lbs./10.9 kg                                                                                                                   |
|             | *Dimensions are for the base model printer. Consult your salesrepresentative for specifics regarding other configurations.                                                               |

## Printer Specifications

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| Resolution           | 203 dpi/8 dots per mm<br>300 dpi/12 dots per mm (optional) |
| Memory               | 256 MB SDRAM memory<br>256 MB on-board linear Flash memory |
| Maximum Print Width  | 4.09 in./104 mm                                            |
| Maximum Print Speed  | 12 ips (203 dpi)<br>8 ips (300 dpi)                        |
| Media Sensors        | Moveable transmissive and reflective sensors               |
| Maximum Print Length | 203 dpi: 157 in/3988 mm<br>300 dpi: 73in/1854 mm           |

## Media Characteristics

|                                |                                                                                                      |
|--------------------------------|------------------------------------------------------------------------------------------------------|
| Minimum Label and Liner Length | Tear mode: 0.7 in/18 mm<br>Cutter mode: 1 in/25 mm<br>Peel mode: 0.5 in/13 mm                        |
| Media Width                    | 0.75 in./19.4 mm to 4.50 in./114 mm                                                                  |
| Media Roll Size                | 8.0 in./203 mm O.D. on a 3.0 in./76 mm I.D. core<br>6.0 in./152 mm O.D. on a 1.0 in./25 mm I.D. core |
| Media Thickness                | 0.003 in./0.076 mm to 0.010 in./0.25 mm                                                              |
| Media Types                    | Continuous, die-cut, notch, black mark                                                               |

## 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 simplifies label formatting and enables format compatibility with legacy applications. (EPL available on 203 dpi models only.)

## 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 with 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: Aztec, Codablock, PDF417, Code 49, Data Matrix, MaxiCode, QR Code, MicroPDF417, TLC 39, RSS-14 (and composite)

## Fonts and Graphics

Z7 bitmapped, 1 smooth-scalable (CG Triumvirate™ Bold Condensed) Pre-loaded Unicode™-compliant scalable fonts for EMEA character sets International character sets supporting the following code page: IBM™ Code Page 850  
Supports user-defined fonts and graphics, including custom logos ZPL II drawing commands including boxes and lines 64 MB user available Flash memory storage for downloadable objects; 32 MB user-available SDRAM

## Options and Accessories

- Communication
- 802.11ac Wi-Fi option card
  - 10/100 Ethernet option card
  - Applicator Interface
- Media Handling
- Peel — a front-mount, passive-peel with no take-up spindle
  - Peel — a front-mount, passive-peel with liner take-up spindle (factory-fit only)
  - Cutter — a front-mount guillotine cutter
- RFID
- UHF field-installable RFID kit
- Keyboard Display Unit
- ZKDU™ keyboard display units for stand-alone printing applications

## Managed Print Services (MPS) Made Simple

Our printers offer innovative remote management, analytics and security capabilities that make them the obvious choice for MPS. With the Print DNA software suite, your Zebra MPS provider can remotely manage and optimize your printers, track and automate supplies replenishment and ensure security. For more information, please visit [www.zebra.com/managed-print-services](http://www.zebra.com/managed-print-services)

# Markets and Applications

## Manufacturing

- Work-in-process
- Product ID/serial numbers
- Packaging labeling
- Receiving/put-away labeling
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## Transportation and Logistics

- Order picking/packing
- Shipping/receiving
- Cross-docking
- Compliance labeling
- 

## Healthcare

- Laboratory labeling
- Blood bank labeling
- Asset tracking
- Unit-dose labeling
- Pharmacy labeling
- 

## Retail

- Buy online pick up in store labeling
- Return tagging
- Price labeling
- Shipping labeling
-

Ribbon Characteristics (Thermal-transfer option only)

|                 |                                |
|-----------------|--------------------------------|
| Standard Length | 1,476 ft./450 m                |
| Width           | 2 in./51 mm to 4.33 in./110 mm |
| Core            | 1.0 in./25.4 mm                |

Operating Characteristics

|                                    |                                                                                                                                                                                                                                                    |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Temp.                    | Thermal transfer: 40°F to 105°F/5° to 40°C<br>Direct thermal: 32°F to 105°F/0° to 40°C                                                                                                                                                             |
| Storage/Transportation Temperature | -40°F to 140°F/-40° to 60°C                                                                                                                                                                                                                        |
| Operating Humidity                 | 20% to 85% non-condensing                                                                                                                                                                                                                          |
| Storage Humidity                   | 5% to 85% non-condensing                                                                                                                                                                                                                           |
| Electrical                         | Universal auto-ranging (PFC-compliant) power supply 100-240 VAC; 50-60 Hz<br>ENERGY STAR certified                                                                                                                                                 |
| Agency Approvals                   | IEC 62368-1, EN55022 Class B, EN55024, EN55035, EN61000-3-2, EN61000-3-3, FCC Class B, ICES-003, FCC 15.209; 15.247(d), IC RSS 247, EN 300 328, EN 301 893, EN 62311, cTUVus, CE Marking, UKCA, VCCI, RCM, S-Mark, CCC, CU EAC, BSMI, KCC, and BIS |

Print DNA Software

This printer is supported by our Print DNA suite of software capabilities to get your printer up and running quickly and securely, and enable your printer to evolve with your business needs. Print DNA features may vary by model, and some features may require a license.  
For more information, please visit [www.zebra.com/printdna](http://www.zebra.com/printdna)