

# ZD621R/ZD611R Desktop Printers

Premium features, maximum performance, RFID capabilities and unmatched security

You need a compact, premium RFID printer/encoder that's built to perform flawlessly – day in and day out. Rely on Zebra's 4-inch ZD621R desktop RAIN/RFID printer/encoder, or the ZD611R, the industry's only 2-inch desktop RAIN RFID printer/encoder. Get it all: an innovative architecture to power our ever-expanding printer capabilities and software. Unmatched security to safeguard your sensitive data and shield you from cyberattacks. A large 4.3 in., full-color LCD touch display with intuitive menu. Enhanced features, communication and field-installable media-handling options, and increased remote-management capabilities. Together, these give you outstanding print performance and industry-leading reliability, along with unparalleled intelligence and security, to keep you moving forward.



## Expanding Zebra's RFID Desktop Capabilities

### Print and Encode 4- and 2-inch Labels and Tags

Building on the legacy of the ZD500R, the 4-inch ZD621R features an innovative architecture that is nearly 32% more powerful. Expanding the desktop RFID line, the ZD611R shares that architecture and is the industry's only 2-inch desktop RAIN RFID printer/encoder. Both the ZD621R and ZD611R can perform more operations simultaneously, deliver best-practice security and are engineered to evolve with emerging technology.

## Zebra RFID: More Transformation, No Complication

### Flexibility for a Broad Range of Uses and Applications

The ZD621R and ZD611R utilize Zebra's own RE40 RFID module to support a number of applications across several industries. Adaptive encoding technology allows for excellent media flexibility and simple RFID calibration, eliminating complex placement guidelines. Optimized to efficiently print and encode labels, tags and wristbands, they give you greater tracking abilities, deeper visibility and enterprise insights in an ever-competitive business environment.

### RFID Backed by the Broadest, Field-Proven Portfolio

Zebra leverages decades of expertise, design thinking and software development to help you deliver maximum RFID gains, while minimizing the pains that can come with multi-vendor solutions. Zebra gives you the industry's broadest, field-proven RFID portfolio for unmatched accuracy and interoperability. Look to Zebra's consistent, fully scaled platform that anticipates real-world challenges and elevates the performance of every system, device, tag and worker.

## Expect the Best

### Premier Printing Performance

From outstanding print quality to RFID printing/encoding, portability for application flexibility to emerging technology, and field-installable options, the ZD621R and ZD611R thermal transfer RFID printers support a wide variety of use cases and requirements.



**The ZD621R and ZD611R—Premium print quality, features, RFID capabilities and reliability for today and tomorrow.**

For more information, please visit [www.zebra.com/zd600](http://www.zebra.com/zd600)

## Operate with Ease

### Intuitive User Interface

Interact at a touch with the 4.3 in., full-color LCD touch display. Their easy-to-use menus feature step-by-step setup wizards, troubleshooting animations, media-loading and calibration guidance, and support standalone printing applications. The display also changes color to clearly show printer status at a glance. And, color-coded touch points guide users through media handling tasks for speedy media changes. Zebra touch displays are designed and tested for toughness and reliability, including robust tolerance to temperature, humidity, dust and other environmental challenges.

### Backwards Compatible with Virtually Any Existing Thermal Printer

Use the same label formats and applications you're using today. These printers support both EPL and ZPL printer languages, and can emulate languages normally associated with other printer brands using the Zebra DNA™ Printer Emulations app.

### Connect Your Way with Comprehensive Communication

Integrate your ZD621R or ZD611R to your existing wired and wireless networks or connect them directly to any PC. Every ZD621R and ZD611R comes with Ethernet, USB 2.0 and USB host, or add an optional dual wireless radio. Choose from 802.11ac Wi-Fi™ and Bluetooth® 4.1 or 802.11ax and Bluetooth 5.3. Serial is standard on the ZD621R, and optional on the ZD611R. Print from any Windows™, Android™ or iOS™ device, and utilize Zebra's printer setup mobile app using Bluetooth Low Energy (BLE).

### Engineered for Outstanding Print Quality

Like Zebra's industrial printers, the ZD621R includes a media dancer to ensure maximum quality on every label and tag, regardless of print speed. Further boost print quality with the optional 300 dpi print resolution.

## Zebra DNA for Printers

### Print Securely and Confidently, Without Hassles

Trust the Zebra DNA suite of software, powered by our Link-OS™ operating system, to get your printer up and running quickly and securely. Print consistently, and uninterrupted with a solution that enables your printer to evolve with your business needs.

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

With Zebra's Printer Profile Manager Enterprise, manage all your Zebra DNA printers anywhere in the world remotely from one location.

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

Shield yourself from cyberattacks with Zebra's PrintSecure, part of Zebra DNA. Easily configure your printers via secure connections, identify vulnerabilities, block unauthorized access and more.

## Explore Managed Print Services (MPS) with Assurance

### Zebra's Thermal Printers with Zebra DNA Make MPS Easy

Our printers are engineered for durability, and offer innovative management, analytics and security, making them ideal for MPS. With the Zebra DNA software suite, your Zebra MPS provider can lower your operating costs and IT workload by remotely managing your printers, track and automate supplies, and ensure security.

## Get the Features you Need, When you Need Them

### Turn Your ZD621R and ZD611R Into Portable Printers

Easily transport your ZD621R or ZD611R printer on a cart with Zebra's battery option. Print where you work to reduce steps and increase accuracy. Power through a full shift with the high-capacity battery. A carrying case is also available for the ZD621R.<sup>1</sup> Add features without interruption including a field-upgradeable wireless kit and media handling options.

## Supplies, Service and Support

### Zebra Certified Supplies

Printing supplies provide a digital voice for assets across your supply chain. 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, tags and receipt paper 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

## RFID Features

- Supports tags compatible with UHF EPC Gen 2 V2.1, ISO/IEC 18000-63 and RAIN RFID protocols
- Prints and encodes tags with a minimum pitch of 0.6"/16 mm
- Adaptive Encoding Technology simplifies RFID setup and eliminates complex RFID placement guidelines
- RFID job monitoring tools track RFID performance
- Globally certified in more than 70 countries for RFID to support multinational deployments
- RFID log records all RFID data with timestamps, ensuring complete traceability
- RFID ZPL commands provide computability with existing Zebra printers
- Support for industry-standard, multi-vendor chip-based serialization (MCS)
- Integrated Zebra RE40 RFID Reader/Encoder

## Standard Features

- Print methods: Thermal Transfer or Direct Thermal
- ZPL and EPL programming languages
- 4.3 in. full color touch LCD (resolution: 480 wide x 272 high) with 3-button user interface
- Ethernet, USB 2.0, USB Host
- Printer setup mobile app for Android and iOS via BLE (Bluetooth Low Energy 5) connection\*
- \* BLE is intended for use with Zebra printer setup mobile app only
- Real Time Clock (RTC)
- Media dancer for excellent print quality <sup>2</sup>
- OpenACCESS™ for easy media loading
- Dual-wall frame construction
- ENERGY STAR™ certified

## Physical Characteristics

Dimensions	ZD621R: 10.5 in. L x 8.0 in. W x 7.5 in. H 267 mm L x 202 mm W x 192 mm H ZD611R: 9.56 in. L x 5.46 in. W x 6.66 in. H 242.9 mm L x 138.7 mm W x 169.2 mm H
Weight	ZD621R: 5.5 lb./2.5 kg ZD611R: 3.59 lb./1.629 kg

## Printer Specifications

Operating System	Link-OS
Resolution	203 dpi/8 dots per mm 300 dpi/12 dots per mm (optional)
Memory	512 MB Flash; 256 MB SDRAM
Maximum Print Width	ZD621R: 4.09 in./104 mm for 203 dpi; 4.27 in./108 mm for 300 dpi ZD611R: 2.2 in./56 mm for 203 dpi; 2.13 in./54 mm for 300 dpi
Maximum Print Speed	8 in./203 mm per second (203 dpi) 6 in./152 mm per second (300 dpi)
Media Sensors	Full width, moveable reflective/black mark sensor; multi-position transmissive/gap sensor
Firmware	ZPL II; EPL 2; XML; ZBI; PDF Direct

## Printers Supplies

For industry-leading quality, service and thermal printing expertise, choose Zebra Certified Supplies to ensure consistent, optimized performance for your Zebra printer.

## Regulatory

IEC 60950-1, 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, VCCI, C-Tick, S-Mark, CCC, CU, BSMI, KCC, SABS, IN-Metro, BIS, NOM

## Environmental Compliance

Environment  
• RoHS Directive 2011/65/EU; Amendment 2015/863  
• REACH SVHC 1907/2006  
For a complete list of product and materials compliance, please visit [www.zebra.com/environment](http://www.zebra.com/environment)

## Zebra DNA for Printers

Durable printers are essential, but it's the software inside that will keep them in action. Zebra DNA tools and applications for printers give you the ability to optimize printer performance over the entire lifecycle, even as your business needs evolve. For more information, please visit [www.zebra.com/zebradna](http://www.zebra.com/zebradna)

## Included In The Box

Printer, empty ribbon take-up cores: ZD611R 0.5 in.; ZD621R 1 in. and 0.5 in., AC power supply, power cord(s), USB cable, Quick Start Guide, Regulatory Guide

## Recommended Services

	Zebra OneCare™ maintenance plans provide peak performance and device uptime while protecting your critical operations and your printers with defined service levels. For more information go to <a href="http://www.zebra.com/zebraonecare">www.zebra.com/zebraonecare</a>
Zebra OneCare Select	Comprehensive Coverage, including printheads, normal wear and accidental breakage Priority access 24x7 live technical support and software updates Advance Replacement and Express Shipping (Next Day Device Replacement) Standard Commissioning Online Return Material Authorization (RMA) support
Zebra OneCare Essential	Comprehensive Coverage, including printheads, normal wear and accidental breakage Priority access 8x5 live technical support and software updates Three-day depot repair turnaround time plus free return ground shipping Online Return Material Authorization (RMA) support
	Note: Service availability may vary by region.

# Markets and Applications

## Retail

- Apparel / merchandise tag
- In-store tagging
- Retail pharmacy totes

## Food and Beverage

- Expiration date tracking
- Food safety recall management

## Healthcare

- Patient ID wristbands
- Medical equipment tracking
- Specimen labeling

## Hospitality

- RFID wristbands

## Media and Ribbon Characteristics

Label Length	Minimum: 0.25 in./6.35 mm Maximum: 39.0 in./991 mm
Media Width	ZD621R: 0.585 in./15 mm to 4.65 in./118 mm ZD611R: 0.585 in./15 mm to 2.36 in./60 mm
Media Roll Size	Maximum outer diameter: 5.00 in./127 mm Core inner diameter: 0.5 in./12.7 mm and 1.0 in./25.4 mm standard, 1.5 in./38.1, 2.0 in./50.8 mm and 3.0 in./76.2 mm using optional adapters
Media Thickness	0.0024 in./0.06 mm min.; 0.0075 in./0.1905 mm max. (tear-off mode only)
Media Types	Roll-fed or fan-fold, die cut or continuous with or without black mark, tag stock, continuous receipt paper, and wristbands
Ribbon Outside Diameter	2.6 in./66 mm (300 m); 1.34 in./34 mm (74 m)
Ribbon Standard Length	984 ft./300 m; 243 ft./74 m
Ribbon Ratio	1:4 ribbon to media (300 m) 1:1 ribbon to media (74 m)
Ribbon Width	ZD621R: 1.3 in./33 mm - 4.3 in./109.2 mm ZD611R: 1.3 in./33 mm - 2.24 in./58 mm
Ribbon Core I.D.	1 in./25.4 mm (300 m) 0.5 in./12.7 mm (74 m)

## Product Warranty

ZD600 Series printers are warranted against defects in workmanship and materials for a minimum period of 2 (two) years from the date of shipment. Warranty varies by region. For complete warranty details, please visit [www.zebra.com/warranty](http://www.zebra.com/warranty)

## Footnotes

1. Does not fit when cutter or peeler attached
2. ZD621R model printer only

## Operating Characteristics

Operating Temp.	40° to 105° F/4.4° to 41° C
Storage Temp.	-40° to 140° F/-40° to 60° C
Operating Humidity	10% to 90% non-condensing
Storage Humidity	5% to 95% non-condensing
Electrical	Auto-detectable (PFC Compliant) 100-240VAC, 50-60Hz; ENERGY STAR certified; Energy Efficiency Level VI certified; optional 2750 mAh battery; Healthcare models include IEC60601-1 certified power supply

## Options and Accessories

Media Handling	Dispenser/Peeler: label peel and present with label present sensor (factory installed or field installable) Cutter (factory or field installable)
Communications	Factory installed wireless dual radio 802.11ax (Wi-Fi 6) and Bluetooth 5.3 (MIMO). Field installable wireless dual radio 802.11ax (Wi-Fi 6) and Bluetooth 5.3 (SISO)
Battery	Provides power to the printer to support a full shift of printing at maximum print speed; supports all media handling options
Keyboard Display Unit	ZKDU keyboard display unit for stand-alone printing solution

Fonts/Graphics/Symbologies

Barcode Ratios	2:1 and 3:1
1D Barcodes	Code 11, Code 39, Code 93, Code 128, ISBT-128, UPC-A, UPC-E, EAN-8, EAN-13, UPC and EAN 2-or 5-digit extensions, Plessey, Postnet, Standard
2D Barcodes	Codablock, PDF417, Code 49, DataMatrix, MaxiCode, QR Code, MicroPDF, Aztec
Fonts and Graphics	16 resident expandable ZPL II bitmap fonts, two resident scalable ZPL fonts, five resident expandable EPL2 fonts, native open-type font support, Unicode compliant. China units include SimSun simplified Chinese font 64 MB user available non-volatile memory, 8 MB user available SDRAM