

# **Performance Desktop Printers**

# DELIVERING BEST-IN-CLASS QUALITY, FEATURES AND PRINT SPEEDS TO KEEP YOUR OPERATIONS MOVING FORWARD

Quality counts. Zebra's performance desktop printers deliver it. From flexibility to features, Zebra's  $GX420^{\text{TM}}$ ,  $GX430^{\text{TM}}$  and  $ZD500^{\text{TM}}$  have you covered. Each offers a variety of connectivity options, and easy upgrades and integration with  $ZPL^{\text{SM}}$  and  $EPL^{\text{TM}}$  (GX models only) programming languages. ENERGY STAR® qualified, these printers help you increase efficiency and profitability, and reduce your total cost of ownership.

Supporting a wide range of applications, there's a printer for almost every environment. Whatever your needs—from flexibility to innovative label capabilities to time savings and reduced operator training—these printers deliver.



## **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 for 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.

## **Quality Engineering for Extended Use**

Featuring dual-wall frame construction, Zebra's performance desktop printers are engineered to perform for years. And, their compact size and clamshell design allow them to fit in even the most space-constrained environments.

## GX420

Compact and available with direct thermal or thermal transfer, the GX420 combines an intuitive design and optional LCD user interface that make it easy to operate. Versatile connectivity options give you added flexibility.

### GX430

Ideal for small-label printing of text and graphics, Zebra's high-resolution GX430 thermal transfer printer delivers outstanding quality and fast print speeds.

### **ZD500**

Our most innovative desktop printer, the ZD500 features Zebra's Link-OS® environment—a cutting-edge operating system combining a powerful Multiplatform Software Development Kit and software applications—making it easy to integrate, manage and maintain from any location around the globe. Equipped with a ten-button menu and LCD display, it's designed to be simple to set up and intuitive to operate. Offering high-resolution print quality and quadruple connectivity options, the ZD500 is compact and feature-packed for top performance. And, it is available with optional UHF RFID capabilities.

## Feature Packed to Meet Your Printing Needs

Whether you are looking for thermal transfer or direct thermal models, these printers are loaded with features to reduce operator error and increase productivity. OpenACCESS™ enables quick and easy media loading, and tool-less printhead and platen replacement makes maintenance simple. Wi-Fi Certified® communications and certified Microsoft® Windows® drivers provide easy integration and setup. And, fast print speeds help your team get the job done even quicker.

## More Options to Make the Job Easier

Extended media handling options such as peel and present, precision cutter for labels, receipts and tags, and linerless labels give you the flexibility to customize each printer to meet your specific needs.

## **Broad Connectivity to Match Your Network**

Advanced connectivity options including Serial, Parallel, USB, Ethernet and wireless 802.11 or Bluetooth® allow operation on nearly any network.







## Compare the Features of the GX420, GX430 and ZD500







	GX420	GX430	ZD500
Print Resolution	203 dpi	300 dpi	203 / 300 dpi
Maximum Print Width	4"	4"	4"
Maximum Print Speed	6 inches per second	4 inches per second	6 inches per second (203 dpi) 4 inches per second (300 dpi)
Connectivity	USB v1.1, Serial, Parallel (Standard) Ethernet or 802.11b/g or Bluetooth® 2.0 (Optional, replaces Parallel port)	USB v1.1, Serial, Parallel (Standard) Ethernet or 802.11b/g or Bluetooth 2.0 (Optional, replaces Parallel port)	USB v.2.0, Serial, Parallel and Ethernet (Standard) Dual radio 802.11a/b/g/n and Bluetooth 3.0 (Optional)
User Interface	LCD user interface (Optional)	LCD user interface (Optional)	LCD user interface (Standard)
Management and Support	ZebraLink™	ZebraLink	Link-OS-enabled for remote management
Media Handling Options	Cutter  Dispenser — label peel and present with label present sensor	Cutter  Dispenser — label peel and present with label present sensor	Cutter  Dispenser — label peel and present with label present sensor
Sensors	Fixed transmissive and reflective sensors (Standard)  Multi-position transmissive and full width reflective sensor (Optional)	Fixed transmissive and reflective sensors (Standard)  Multi-position transmissive and full width reflective sensor (Optional)	Multi-position transmissive and adjustable reflective sensors (Standard)

## **The Link-OS Environment**

To meet emerging business needs and growing demands for devices that are intelligent and connected to the Cloud, Zebra created a new software platform to support its devices: Zebra's Link-OS environment. This innovative solution makes Zebra's Link-OS-enabled printers even easier to integrate, manage and maintain than ever before.

Highly flexible, the Link-OS environment allows new and creative ways for users to develop applications that interact with these printers from mobile devices located anywhere in the world. Users can perform updates, gather data and make smarter business choices from analyticdriven insights.

## **ZD500 Link-OS Environment Features**

Link-OS App	Benefit
Virtual Devices	Support well-known legacy and competitor printer languages for a future-proofed investment
Print Touch	Award-winning, web page launching features using Near Field Communication (NFC) make it easy to access Zebra's extensive knowledge base of how-to videos and product support
Cloud Connect	Interact securely and directly with the Cloud for printing and device management
Profile Manager	Edit and manage one printer, batches of printers or all Link-OS printers across your network anywhere in the world

STANDARD FEATURES

· ZPL programming language

## **Performance Desktop Printers Specifications**

## • EPL programming language (GX models only) · Dual-wall frame construction · Tool-less printhead and platen replacement . OpenACCESS™ for easy media loading · Quick and easy ribbon loading • Simplified calibration of media · Certified Microsoft® Windows® drivers • Wi-Fi® certified communications • ENERGY STAR® qualified PRINTER SPECIFICATIONS 203 dpi/8 dots per mm Resolution 300 dpi/12 dots per mm (standard on GX430t, optional on ZD500) Memory **GX Models** Standard: 4 MB Flash; 8 MB SDRAM Optional: 64 MB (68 MB total) Flash with real-time clock Standard: 256 MB Flash; 128 MB SDRAM Real-time clock **Maximum Print** 4.09"/104 mm Width Maximum Print 6"/152 mm per second (203 dpi) Speed 4"/102 mm per second (300 dpi) Media Sensors Standard: Fixed transmissive and reflective sensors Optional: Multi-position transmissive and full-width reflective sensor ZD500 Multi-position transmissive and adjustable reflective sensors **Maximum Print** 39"/991 mm Length MEDIA CHARACTERISTICS Media Width 0.75"/19 mm — 4.25"/108 mm Media Roll Size Maximum outside diameter: 5"/127 mm

	receipt paper, wristbands	
RIBBON CHARACTERISTICS (Thermal-transfer option only)		
Standard Length	244'/74 M	
Width	1.33"/33.8 mm to 4.3"/109.2 mm	
Core I.D.	0.5"/12.7 mm	

Core inner diameter: 0.5"/12.7 mm, 1.0"/25 mm,

GX Models: 0.003"/0.08 mm to 0.0075"/0.19 mm

Roll-fed or fan-fed, die-cut or continuous direct thermal

labels with or without black line, tag stock, continuous

ZD500: 0.003"/0.08 mm to 0.012"/0.305 mm

1.375"/35 mm, 1.5"/37.1 mm, 3"/76 mm

Media Thickness

Media Types

OPERATING CHARACTERISTICS			
Environmental	Operating Temperature: 40°F to 105°F/4.4°C to 41°C Operating Humidity: 10% to 90% non-condensing Storage/Transportation Temperature: -40°F to 140°F/ -40°C to 60°C Storage Humidity: 5% to 95% non-condensing		
Electrical	Auto-ranging external power supply with C14 type connector Output: 24 VDC, 3.125A Input: 100-240 VAC, 50-60 Hz ENERGY STAR qualified		
Agency Approvals	GX Models		
	Emissions: FCC Part 15, Subpart B (Class B), ICES 003, VCCI, RCM, CQC, EAC, KCC, BSMI		
	Emissions and Susceptibility: EN50032 (Class B), EN55024, EN61000-3-2 add EN61000-3-3		
	Safety: CB Scheme IEC 60950-1, TUV NRTL, RCM, CCC, NOM, EAC, KCC, BSMI, BIS, INMETRO		
	ZD500		
	Emissions: FCC Part 15, Subpart B (Class B), ICES 003, VCCI, RCM, CQC, EAC, KCC, BSMI		
	Emissions and Susceptibility: EN50032 (Class B), EN55024, EN61000-3-2, EN61000-3-3		
	Safety: CB Scheme IEC 60950-1, TUV NRTL, RCM, CCC, NOM, EAC, KCC, BSMI, BIS, INMETRO		

## PHYSICAL CHARACTERISTICS

	Direct Thermal	Thermal Transfer	
Length	8.25"/210 mm	10.0"/254 mm	
Width	6.75"/171 mm	7.6"/193 mm	
Height	6.0"/152 mm	7.5"/191 mm	
Weight	3 lbs/1.4 kg	4.6 lbs/2.1 kg	
COMMUNICATION AND INTERFACE CAPABILITIES			

## **GX Models**

- RS-232 auto-sensing Serial interface, DB-9
- · USB V1.1, bi-directional
- Centronics Parallel
- Ethernet 10/100 internal (optional) offered in combination with USB and Serial interface (replaces Parallel port)
- Wireless 802.11b/g or Bluetooth 2.0 (optional) with LCD display offered in combination with USB and Serial interfaces (replaces Parallel port)

- RS-232 auto-sensing Serial interface, DB-9
- USB V2.0, bi-directional
- Centronics® Parallel
- Ethernet 10/100 internal
- Wireless Dual radio 802.11a/b/g/n and Bluetooth 3.0 (optional)

## **Ideal for These Applications**

## Retail

- Inventory and price labeling
- · Receipt printing
- · Item tagging

## Transportation and Logistics

 Shipping and receiving labeling

## Healthcare

- · Patient identification
- · Blood bag and specimen labeling
- Breast milk labeling

## **Light Manufacturing**

- · Light industrial work-in-process
- · Asset tracking

### **Postal Counter** Automation

· Receipt and label printing

## High-resolution Label Printing

## **Performance Desktop Printers Specifications**

## **SOFTWARE TOOLS**

Link-OS Solutions (ZD500 Model only)

**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

ZebraLink Solutions (GX Models only)

**Zebra Setup Utilities** — A Windows application to quickly set up and configure your Zebra printer.

ZebraDesigner™ — Simple Windows WYSIWYG label design application with basic features

**ZebraDesigner Pro** — Simple Windows WYSIWYG label design application offering more advanced features for more complex label designs (option).

**ZBI-Developer**<sup>™</sup> — Programming utility makes it dramatically easier for programmers to create and test complex ZBI 2.0 programs and distribute them to the printer (standard with ZBI 2.0).

**ZebraNet**\*\* **Bridge Enterprise** — Centrally manage Zebra printers from a single PC screen anywhere on your global network.

**ZebraNet Utilities v7.0** — Provides enhanced printing, conversion and administration capabilities; message management; and more.

**Zebra Enterprise Connector** — Print labels directly from Oracle's BI Publisher with the Enterprise Connector and Zebra printers.

**ZebraDesigner Windows Driver** — Zebra's powerful Microsoft certified Windows driver.

POS Driver

## GX and ZD500 Models:

## Web View

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 2.0** $^{\omega}$  — 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 with Line Mode available on direct thermal models only. EPL not available on the ZD500.)

## **BARCODE SYMBOLOGIES**

Barcode Ratios: 2:1 (non-rotated) and 3:1

Linear Barcodes: Codabar, Code 11 (ZPL), Code 128, Code 39, Code 93, EAN-13, EAN-8, EAN-14 (ZPL), German Post Code (EPL), Industrial 2-of-5 (ZPL), Interleaved 2-of-5, Japanese Postnet (EPL), ISBT-128 (ZPL), Logmars (ZPL), MSI, Plessey, Postnet, GS1 DataBar (RSS-14), Standard 2-of-5 (ZPL), UCC/EAN-128 (EPL), UPC and Land UPC-E with EAN 2 or 5 digit extensions (ZPL), UPC-A, UPC-A and UPC-E with EAN 2 or 5 digit extensions, UPC-E. EPL Barcodes are available on GX Models only 2D Barcodes: Codablock (ZPL), Code 49 (ZPL), Data Matrix, MaxiCode, QR Code, PDF-417, MicroPDF-417, Aztec (for EPL and ZPL except where noted)

## **FONTS AND GRAPHICS**

16 resident expandable ZPL II bitmap fonts

Two resident scalable ZPL fonts

Five resident expandable EPL2 fonts (GX models only)

Native open-type font support

Unicode™ compliant for multi-language, on-demand thermal printing

 ${\bf Supports\ user-defined\ fonts\ and\ graphics-including\ custom\ logos}$ 

ZPL II drawing commands — for boxes and lines

1.5 MB user available non-volatile memory storage for downloadable objects, 3 MB user-available SDRAM (GX models only)

3 MB user-available SDRAM (GX models only)

56 MB user available Flash memory, 4 MB user available SDRAM (ZD500 model only)

## **OPTIONS AND ACCESSORIES**

Dispenser — label peel and present with label present sensor

UHF RFID capabilities help keep your critical operations running efficiently (optional, ZD500)  $\,$ 

Adjustable media sensor (GX models)

Cutter for various media types

300 dpi print resolution printing for fine detail and crisp images (ZD500)

64 MB Flash memory with real-time clock (for total of 68 MB) (GX models)

Font Packs — Asian and other international font kits

 $\mathsf{ZKDU}^{\scriptscriptstyle\mathsf{IM}}$  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.

