Zebra® Performance Desktop Printers

ZEBRA
TECHNOLOGIES

SEE MORE. DO MORE.

GX420™ (thermal transfer and direct thermal)
GX430™ (thermal transfer)
ZD500™ (thermal transfer and direct thermal)

Zebra's performance desktop printers deliver best-in-class print speeds and features for improved efficiency and profitability. Each offers a variety of connectivity options, easy upgrades and integration with ZPL® and EPL™ (GX models only) programming languages and reduced total cost of ownership as ENERGY STAR® qualified printers.

Performance desktop printers support 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. Extended media handling options include peel and present, precision cutter for labels, receipts and tags, and linerless labels.

Ideal for These Applications

Retail

Healthcare

Light manufacturing

Hospitality

Postal counter automation

High-resolution label printing

PERFORMANCE DESKTOP PRINTERS

Fast print speeds. Advanced features. Performance options to meet your needs.

GX420

This compact printer, available with direct thermal or thermal transfer, combines an intuitive design and optional LCD user interface with versatile connectivity options.

GX430

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

ZD500

The ZD500 features Zebra's Link-OS® environment—an innovative 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. Coupled with intuitive ribbon and media loading, it's designed to be simple to set up and operate. Offering high-resolution print quality and quadruple connectivity options, the ZD500 is compact and feature-packed for top performance. The ZD500 also has optional UHF RFID capabilities.

The Link-OS Environment In-depth

Link-OS®

To meet changing expectations and growing demands for devices that are mobile, 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 printers even easier to integrate, manage and maintain than ever before—from any location.

The Link-OS environment is highly flexible, allowing new and creative ways for users to develop applications that interact with Zebra printers from mobile devices located anywhere in the world. Users can perform updates, gather data, and make smarter business choices from new analytic-driven insights.

ZD500 Link-OS Environment Features

Link-OS App	Benefit
Virtual Devices	Support well-known legacy and competitor printer languages—in addition to ZPL and EPL—for a future-proofed investment
Print Touch	Award-winning, webpage 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

COMPARING THE GX420, GX430 AND ZD500

Compare the features to see which printer best suits your needs.

	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
Standard 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 gap and adjustable reflective sensors

SPECIFICATIONS AT A GLANCE*

Printer Name

GX420, GX430, ZD500

Printer Features

- Thermal transfer or direct thermal print methods
- ZPL programming language
- 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
- ENERGY STAR® qualified

Printer Specifications

Resolution

- 203 dpi/8 dots per mm
- 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

ZD500

- 128 MB Std SDRAM memory (4 MB available to user)
- 256 MB Std Flash memory (56 MB available to user)
- Real time clock

Maximum Print Width

4.09"/104 mm

Maximum Print Length

39.0"/990 mm

Maximum Print Speed

- 6"/152 mm per second (203 dpi)
- 4"/102 mm per second (300 dpi)

Media Sensors

GX Models

- Standard: Fixed transmissive and reflective sensors
- Optional: Multi-position transmissive and full-width reflective sensor

ZD500

- Multi-position transmissive and adjustable reflective sensors

Media Characteristics

Label and Liner Length

- Maximum non-continuous: 39"/990 mm
- Minimum using tear off mode: .25" (6.3 mm)
- Minimum with label present sensor used: 0.5"/12.7 mm
- Minimum with cutter: 1.0"/25.4 mm

Label and Liner Width

0.75"/19 mm - 4.25"/108 mm

Media Roll Size

- Maximum outside diameter: 5"/127 mm
- Core inner diameter: 0.5"/12.7 mm, 1.0"/25 mm, 1.375"/35 mm, 1.5"/37.1 mm, 3"/76 mm

Media Thickness

- GX Models: 0.003"/0.08 mm to 0.0075"/0.019 mm
- ZD500: .003"/0.08 mm to .012"/0.305 mm

Media Types

Roll-fed or fan-fed, die-cut or continuous direct thermal labels with or without black line, tag stock, continuous receipt paper, wristbands

Ribbon Characteristics

- Outside diameter: 1.36"/35 mm
- Standard length: 244'/74 m
- Ratio: 1:1 media to roll to ribbon
- Width: 1.33"/33.8 mm to 4.3"/109.2 mm
- Core inner diameter: 0.5"/12.7 mm

Operating Characteristics

Environmental

- Operating temperature: 40° F/4.4° C to 105° F/41° C
- Storage temperature: -40° F/-40° C to 140° F/60° C
- Operating humidity: 10% to 90% non-condensing
- Storage humidity: 5% to 95% non-condensing

Electrical

- Auto-detectable (PFC Compliant) 100-240VAV, 50-60Hz

Agency Approvals

- Emissions: FCC Part 15, Subpart B, VCCI, C-Tick
- Emissions and Susceptibility: (CE): EN55022
- Class-B, EN61000-3-2, EN61000-3-0 and EN55024, CCC, Wi-Fi®-certified **WiFi** CERTIFIED

Physical Characteristics

	Direct Thermal	Thermal Transfer
Width:	6.75"/171 mm	7.6"/193 mm
Height:	6.0"/152 mm	7.5"/191 mm
Depth:	8.25"/210 mm	10.0"/254 mm
Weight:	3 lbs/1.4 kg	4.6 lbs/2.1 kg

Software

Link-OS Solutions for ZD500

- 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.

Software Tools

- ZebraDesigner™ Pro
- ZebraDesigner
- ZebraNet™ Bridge Enterprise
- ZebraNet Utilities v7.0
- Zebra Universal Driver
- ZebraDesigner Driver
- ZBI-Developer™
- POS Driver

Firmware

- EPL2™ (GX models only)
- EPL Line Mode (GX420d only)
- XML
- ZPL II®
- Web View
- Alert
- ZBI™

Communication and Interface Capabilities

ZD500

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

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)

Fonts/Graphics/Symbologies

Fonts and Character Sets

- 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

Graphic Features

- Supports user-defined fonts and graphics—including custom logos
- ZPL II drawing commands—for boxes and lines

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 EAN 2 or 5 digit extensions (ZPL), UPC-A, UPC-A and UPC-E with EAN 2 or 5 digit extensions, UPC-E, and GS1 Databar (formerly RSS). EPL Barcodes are GX models only
- 2-Dimensional: Codablock (ZPL), Code 49 (ZPL), Data Matrix, MaxiCode, QR Code, PDF417, MicroPDF417, Aztec (for EPL and ZPL except where noted)

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
- KDU Plus™ and ZKDU™ keyboard display units for stand-alone printing solutions