



ZD421 Desktop Printer

Frequently Asked Questions

Q: What is the ZD421 Series?

A: The ZD421 Series desktop printers offer customers high print quality with advanced features. The ZD421 Series includes thermal transfer ribbon roll, ribbon cartridge, direct thermal, and healthcare models. The ZD421t is a direct replacement for the ZD420t and GK420t, the ZD421d is a direct replacement for the ZD420d and GK420d, and the ZD421c replaces the ZD420c.

Q: What's new from ZD420 to ZD421?

- A:
- Optional wireless field upgrade kit for greater product flexibility
 - Zebra printer setup app – you can use the app on every ZD421 printer for setup and troubleshooting, and it's completely free
 - New electronics platform to further expand Print DNA features and capabilities
 - New cutter and peeler design to support shorter label length

Q: What are the key customer benefit messages of the ZD421?

- A:
- Simple to use with intuitive user interface, media guide and media handling design
 - Flexible to support more use cases with thermal transfer, direct thermal and ribbon cartridge models
 - Easy to setup, use, manage and secure with Print DNA software suite
 - Ready for now and what's next with field-installable connectivity and media handling options



Q: What are the target markets and applications for the ZD421?

Markets	Applications
Retail	<ul style="list-style-type: none"> • Shelf labels • BOPIS • Price markdowns • Return tags • Assets and inventory labels <ul style="list-style-type: none"> • Food information labels • Receipts • Pharmacy labels • E-commerce
Healthcare	<ul style="list-style-type: none"> • Lab and specimen labels • Asset labels • Blood and IV bag labels • Sterile services <ul style="list-style-type: none"> • Patient ID wristbands • Pharmacy/Prescription labels • Patient record labels
Light Manufacturing	<ul style="list-style-type: none"> • Shipping labels • Receiving labels • Agency labels/nameplates • Packing list <ul style="list-style-type: none"> • Inventory • Assets tags • Product labels • Apparel tags
Transportation & Logistics	<ul style="list-style-type: none"> • Asset labels • Shipping & receiving labels <ul style="list-style-type: none"> • Packing slips
Government	<ul style="list-style-type: none"> • Asset labels <ul style="list-style-type: none"> • Record labels
Services & Hospitality	<ul style="list-style-type: none"> • Service reminder labels <ul style="list-style-type: none"> • Ticketing

Q: Are there models of the ZD421 designed for specific markets?

A: Yes, the healthcare model includes an IEC 60601-1 certified medical grade power supply and a plastic shell, that contains UV stabilizers and can be wiped down with disinfectants to destroy germs and bacteria. The high resolution 300 dpi printing option opens new sales opportunities in healthcare, where many small labels with 2D barcodes are required for prescriptions and specimen vials.

Q: What kinds of disinfectants can be used on ZD421 Healthcare printers?

A: For the most recent list of approved cleaning agents visit zebra.com/disinfect.

Q: Is the Healthcare model available in both direct thermal and thermal transfer models?

A: Yes, the ZD421 healthcare model is offered in thermal transfer ribbon cartridge, thermal transfer ribbon roll and direct thermal models.

Q: How does the ZD421-HC differ from the GK420-HC?

A: The housing is now both UV and disinfectant ready. It has an extended range of connectivity options to suit the need to be better integrated, more manageable.

Q: Is the ZD421 offered with a locking media cabinet?

A: No. A locking media cabinet is only offered on the ZD621 healthcare model.

Q: How do the features of the ZD421 compare to the ZD420 and GK420?

A: Refer to the following comparison table.

Features	GK420	ZD420	ZD421
Maximum Print Speed	5 ips	6 ips	6 ips
Print Resolution	203 dpi	203 dpi or 300 dpi	203 dpi or 300 dpi
Standard Connectivity	RS-232 auto-sensing serial, USB 1.1, Centronics parallel	USB 2.0, USB Host	USB 2.0, USB Host
Field Installable Connectivity	None	Auto-sensing, Adaptive Serial or 10/100 Ethernet	Auto-sensing, Adaptive Serial, 10/100 Ethernet, or dual wireless 802.11ac + Bluetooth 4.1
Factory Installed Connectivity	Ethernet (replaces serial and parallel)	Dual wireless 802.11ac + Bluetooth 4.1, 10/100 Ethernet	Dual wireless 802.11ac + Bluetooth 4.1, 10/100 Ethernet
Media Handling Options	Factory installed peeler	Field installable peeler or cutter	Field installable peeler or cutter
Ribbon Handling	74 m (GK420t)	Dual ribbon handling 74 or 300 m ribbon roll, or 74 m cartridge ribbon	Dual ribbon handling 74 or 300 m ribbon roll, or 74 m cartridge ribbon
Media Sensors	Fixed transmissive and reflective	Full width reflective and multi-position transmissive	Full width, moveable reflective/black mark, and multi-position transmissive/gap sensor

Q: What competitive products does the ZD421 desktop printer replace?

A: The ZD421 offers the Print DNA Virtual Device feature which emulates many competitors print languages which facilitates replacement of competitive models including Intermec, TEC, Sato, Datamax, EXD-POS, Monarch, PDF and others. Visit the Source or Partner Gateway for more information.

Q: When should I direct my customer replace a GK420 or ZD420 for a ZD421?

A: The primary reason is to take advantage of the enhanced printer management, monitoring and security capabilities offered by Print DNA. The ZD421 offers wireless connectivity for those customers that require wireless on an advanced printer category. Also, the ZD421 has a full width reflective sensor and multi-position transmissive sensor for greater media support. The modular design of the ZD421 provides flexibility to allow the printer to be upgraded in the field to support changing application requirements. This helps to reduce the total cost of ownership of the printer.

Q: What are the enhanced printer management and monitoring capabilities in the ZD Series?

A: Printer Profile Manager Enterprise (PPME) is a browser-based Print DNA application that provides access to extensive printer status information for networked Zebra printers. The application includes automatic printer discovery for all printers on the network, allows printers to be assigned to logical groups to check status or send updates to the printers. Multiple printer settings can be easily updated for ease of configuration and printer profiles can be saved to be distributed at any time.

Print DNA printers also include connectors for leading MDM applications including SOTI MobiControl and AirWatch.

Q: Are the ZD421 printers backwards compatible with other Zebra printers?

A: The printer has dual resident command language. The co-existent EPL2 and ZPL allows for seamless integration into legacy and current installations. You can swap your older EPL2 or ZPL based desktop printers or add to existing applications. The ZD421 direct thermal 203 dpi model also offers EPL1 Line Mode.

Q: How is the cartridge ribbon model different from the standard ZD421 model?

A: The ZD421 thermal transfer models share the basic specifications with the exception of the ribbon. The standard model supports ribbon rolls in 74 m and 300 m lengths. The ribbon cartridge model is exclusive to Zebra, offering easy, instant ribbon loading, and include a smart chip to alert when the ribbon needs replacing. The cartridge ribbon only supports 74 m ribbon length. Refer to the spec sheet or tech specs for more detail.

Q: Can I print in direct thermal mode with a ZD421 thermal transfer or ZD421 cartridge models?

A: Yes, the ZD421 thermal transfer and ZD421 cartridge models can be configured to print in direct thermal mode.

Q: Can I add a peeler or cutter to a ZD421 desktop printer?

A: Yes. The printer can be upgraded in the field by a partner or end-user to suit the application. This is now a simple, in-field task that only takes a matter of minutes. All upgrade kits come with the necessary Torx tool, so upgrades are fast and easy. The cutter can be used with tag stock, receipts or to cut through liner material. It is not intended to cut through adhesive and should not be used with linerless labels. Note, the ZD421 peeler and cutter are not compatible with the ZD420 printers, or vice versa.

Q: Can I use linerless media with the ZD421?

A: No, linerless media can be used in the ZD621 direct thermal linerless printer.

Q: What connectivity options are available?

A: The ZD421 printer comes standard with USB and USB Host. Optional user-installed Serial or 10/100 Ethernet (IPv4) can easily be added in the field. In addition, we offer a field upgradeable or factory-installed dual wireless option which includes both Wi-Fi certified 802.11ac and MFi certified (compatible with Apple iOS devices) Bluetooth 4.1. Note, the ZD421 Serial and Ethernet modules are not compatible with the ZD420 printers, or vice versa.

Q: Am I limited to use only one connectivity type at one time?

A: No, all the printer's connectivity options can be used simultaneously.

Q: What options and accessories are available for the ZD421?

A: Media handling and connectivity are some of the items available. The ZD Series battery pack and carrying case make the printer a complete transportable solution. An attached power supply is also available, that attaches to the bottom of the printer and houses the power supply (brick), so it is not hanging loose outside of the printer. This reduces the potential for trip hazards and offers a more pleasing aesthetic. For a complete list of available ZD421 options and accessories, please consult the Zebra Solutions Pathway.

Q: Is the ZD Series battery the same for the ZD420 and ZD421?

A: Yes, the battery and housing base are the same for the ZD420 and ZD421. The ZD Series battery is common, regardless of printer model. The base housing that the printer attaches to is specific to the printer type – direct thermal or thermal transfer, and 2-inch or 4-inch printer width.

Q: Can the desktop printer carry case be used with ZD421?

A: Yes, the desktop carry case is universal and can be used with all 4-inch ZD400 and ZD600 Series printers connected to the ZD Series battery.

Note, there are different part numbers for the direct thermal and thermal transfer carrying cases.

Q: Can I mount the printer on the wall, or does it have to be positioned on a desk?

A: The printer does have an adapter plate to wall mount it or allow it to be used in different orientations. For a complete list of available ZD421 options and accessories, please consult Zebra Solutions Pathway.

Q: Does the ZD421 offer a 300-dpi print resolution option?

A: Yes, resolution specific configurations can be bought at the time of purchase.

Q: Can the 300-dpi print resolution option be changed in the field?

A: No, the 300-dpi option is only factory installed.

Q: My GK Series printers only had a single LED button. What are these three new buttons?

A: The control panel combines three function buttons; Pause, Feed and Cancel, which can be used to initiate various setup, calibration and diagnostic routines at start-up or during printer power-on. Further details on the operator controls can be found in the user guide.

Q: What are the icons on the control panel?

A: The five status icons relate to the printer’s operating behavior in respect of its general print condition, data handling, supplies usage and network connection(s). Further details on the operator controls can be found in the user guide.

Q: Does the ZD421 have an LCD option?

A: A color touch LCD option is only available on the ZD621 models.

Q: What is the moveable media sensor?

A: ZD421 printers have a moveable media sensor as standard. This full-width reflective sensor can be moved across the whole print width for use in detecting black mark registration marks. The multi-position transmissive sensor detects registration gaps, notches or die-cut holes in the center of the media.

Q: How much memory is standard on the ZD421 printers?

Total Memory	User Available
512 MB Flash	64 MB Flash
256 MB SDRAM	8 MB SDRAM

Q: Can I get an RFID enabled ZD421?

A: No, an RFID (UHF) option is available on the ZD621R model.

Q: Does the ZD421 have the same serial port configuration as the G-series models?

A: The adaptive auto-sensing of the printer’s serial module will ensure support of either straight through or null modem configurations. Serial connectivity is added to the base printer model via a field-installable module.

Q: Does the ZD421 have the same parallel port configuration as the current G-Series models?

A: The ZD421 printer does not have a parallel port option. It is advised to find a suitable third-party adapter to connect to one of the ZD421 wired connectivity options.

Q: Can I use my external ZebraNet print server on the ZD421?

A: No. The external print servers are not supported; however, these can still be used on parallel port enabled G-series printers.

Q: What is Print Touch?

A: The Near Field Communication (NFC) Print Touch feature of the Print DNA enabled ZD421 allows quick access to helpful information. Print Touch supports:

- Application launching on NFC-enabled mobile devices
- Printer support web page launching to provide easy access to Zebra’s how-to videos and product support

Q: Does the printer have a Real-Time Clock?

A: It is a standard feature on all ZD421 configurations.

Q: What is the difference between Bluetooth 4.1 and Bluetooth Low Energy?

A: Bluetooth low energy is a low power wireless communication with limited speed and range performance, and only intended for the Zebra printer setup app. Bluetooth 4.1 can be used to configure the printer but can also be used to transmit a much greater amount of data and can be used to download fonts, firmware, graphics and label formats to the printer.

Q: Do you have a setup utility for use with my mobile device?

A: Yes, the Zebra Printer Setup app is available for Android and iOS devices.

Q: What is the USB host used for?

A: The USB host supports the USB Mirror functionality to provide an easy way to upgrade printer firmware or execute command files using a USB flash drive. In addition, you can attach a USB keyboard or barcode scanner to the USB host port. Further details can be found in the ZD421 user manual.

Q: Will the Zebra Keyboard Display Unit (ZKDU) work with the ZD421?

A: Yes, if installed, the optional serial port interface on the ZD421 will support the ZKDU.

Q: What ribbons can I use in the ZD421t?

A: The ZD421t can accept 74 m or 300 m ribbons. Ribbons used on ZD420t and GK420t printers can be used in the ZD421t. A 300 m ribbon offers a 4:1 ratio for changing ribbons and media, resulting in enhanced productivity and a reduction in time spent changing ribbons.

Q: Can I use third-party ribbons in the ZD421t?

A: Zebra recommends to always use Zebra genuine supplies in the printer. The ZD421t will accommodate use of third-party ribbon via way of the included ribbon core adapters.

Q: Can I use my ZD421c ribbon cartridge in the ZD421t?

A: No. There are distinct difference between the ZD421c and ZD421t. The ZD421c is designed to be used with our ribbon-cartridge only when operating in a thermal transfer mode. The ZD421t is designed to be used with traditional ribbon rolls for a core-to-core solution.

Q: Can I convert my ZD421t to accept a ribbon cartridge?

A: No. The ribbon handling of the ZD421t and ZD421c cannot be changed. Ribbon rolls and cartridges cannot be interchanged.

Q: Can I use my existing media in the ZD421?

A: Yes. Common media handling means that your Zebra desktop media can be used in the ZD421 model printer.

Q: Can I use fan-fold media in the ZD421?

A: The printer supports the use of externally fed media via way of the letterbox aperture at the back of the printer.

Q: My media roll has a 50 mm core. Can I use it in the ZD421?

A: Yes. In addition to the standard media roll holders supporting 0.5 in. and 1 in. cores, we have accessory items to support 1.5 in., 2 in., and 3 in. core sizes.

Q: Can the ZD421 printer support Asian fonts?

A: The printer's Unicode capabilities can be utilized for true global character printing. If, however, a specific font pack such as Japanese, Chinese, and Korean is required, then please refer to Zebra Solutions Pathway for details of the available font packs. Chinese printer configurations include the Simplified Chinese SimSun or Traditional Chinese font pre-installed.

Q: Can I use my ZD420 or G-series power supply with the ZD421 printer?

A: No. The ZD421 printer ships with its own power supply and this should be used in all cases.

Q: Why has the position of the power switch been moved?

A: The location of the soft power button has been moved to the control panel to aid access when housed in difficult locations.

Q: The older style "rocker switch" power button was required for my kiosk solution.

A: The ZD421 can support this feature. A power override feature on the installed connectivity modules will provide this functionality. Please refer to the printer's associated user manual for further details.

Q: Why does the printer appear to take longer to power-on compared to my G-series?

A: The printer's boot-up time is slightly longer; however, the printer has new Sleep mode that can be used to mitigate the boot-up cycle. Please refer to the user manual for further information.

Q: Can I reset the printer to a factory default?

A: Yes. The printer can be reset with combinations of Pause and Feed or Cancel buttons, or there is a physical reset button underneath the printer. Please refer to the printer's associated user manual.

Q: Does the printer have Energy Star approval?

A: Yes. The printer and power supply are Energy Star Certified and meet the US Department of Energy's Energy Efficiency Level VI requirements.

Q: What service offerings are available for the ZD421?

A: Zebra OneCare offers three service level to choose from, Premier, Select and Essential. This ensures customers find an offering to meet their business needs and budget.

Premier offers a higher level of customized care to maximize process throughput

- Customized printer settings and software
- Integration with 3rd party software and peripherals
- Advanced diagnostics
- Deeper operational insight allows for streamlined operations to truly transform the business

Select delivers more capabilities that directly support business processes with

- Advance Replacement with spares pool management
- Commissioning with printer settings and label formats
- 24/7 technical support help

Essential is foundational service and support that provides

- Comprehensive coverage providing printer cleaning and adjustment
- Technical support during local business hours
- 3-day turnaround time on repairs
- On-Site service option for more critical situations

FREQUENTLY ASKED QUESTIONS

ZD421 DESKTOP PRINTER

Q: Where can I find tutorial videos?

A: The ZD421 printer “how to” support videos can be viewed online from printer’s support page at zebra.com.

Q: Which operating systems are supported?

A: The printer’s associated software is compatible with 32 bit and 64 bit Windows 2000, Windows XP, Windows 2003, Windows Vista, Windows 2008, Windows 7 and Windows 10. Printing from Mac, Unix and Linux systems is supported via the CUPS driver. For more information, visit the [Zebra knowledge base](http://zebra.com).

Q: How do I access new or updated drivers?

A: Drivers can be downloaded from printer’s support page at zebra.com.

Q: Why is there no Accessories CD like my previous G-Series?

A: All associated manuals, software, firmware, drivers, and tutorial information can be viewed or downloaded from the printer’s support page online at zebra.com.

Q: What is included in the box?

A: Printer, empty ribbon take-up cores (1 in. and 0,5 in.)*, 300 m ribbon core adapters for non-Zebra ribbon (2)* AC power supply, power cord(s), USB cable, Quick Start Guide, Regulatory Guide

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