

# ZD510-HC Wristband Printing Solution

## Trust your wristband printing to a specialist

Wristbands play a critical role in your healthcare facility. Staff and patients count on wristbands to provide the instant positive identification required to prevent medical errors. You need dependable and fast wristband printing, durable wristbands and consistently scannable barcodes — and with the ZD510-HC, you get it all. The ZD510-HC Wristband Printing solution combines the reliable ZD510-HC direct thermal printer with easy-to-load cartridges containing the only antimicrobial-coated wristbands on the market — Zebra's Z-Band® wristbands. Your IT department will find ZD510-HC printers easy to integrate, manage and secure, thanks to Zebra's Link-OS® operating system and Zebra's powerful Print DNA suite of applications, utilities and developer tools. Increase staff productivity and patient safety with the industry's easiest to use and most dependable wristband printing solution — the ZD510-HC.



## Easy-To-Use — Virtually No Training Required

### Fast-Loading Wristband Cartridge — Pop it in and Print

The ZD510-HC is the easiest wristband printer to use on the market. Just insert the wristband cartridge containing Zebra Z-Band wristbands and print. The smartchip in each cartridge allows automatic calibration.

## Easy to Deploy

### Multiple Connectivity Options

The ZD510-HC comes standard with Ethernet, USB, USB Host, and Bluetooth Low Energy. The optional dual wireless radio offers 802.11ac and latest security protocols, plus Bluetooth 4.1 with concurrent wired and wireless communications. In addition, with the Print Touch tag (NFC), users can simply tap a compatible mobile device on the ZD510-HC to pair and print — as well as instantly access Zebra's extensive knowledge base of how-to videos.

### Compatible with Leading ADT Systems

The ZD510-HC is validated for use with leading Admission, Discharge and Transfer (ADT) systems, including Allscripts, CareFusion, Cerner, CPSI, Epic and McKesson. You can easily get up and running using their wristband formats.

### Easy Migration — No Matter What Kind of Wristband Printing Solution You Have Today

If you use the Zebra HC100 wristband printer, your existing inventory of wristband cartridges will work with the ZD510-HC. Native ZPL support makes it easy to migrate from another Zebra desktop printer. And migration from practically any third party printer is seamless with Virtual Devices, a Zebra Print DNA tool that can use languages normally associated with other printer brands.

**Trust your wristband printing to a specialist — The ZD510-HC wristband printing solution.**

For more information about the ZD510-HC, visit [www.zebra.com/zd510-hc](http://www.zebra.com/zd510-hc)

## Zebra Z-Bands — Leading Durability and Scannability

### Consistently Exceptional Quality

A barcode that fails to scan jeopardizes patient safety and staff productivity. That's why we design, produce and rigorously pre-test our own line of Z-Band direct thermal wristbands. You get optimum image durability and scanning performance — ensuring first-scan readability even for narrow barcodes.

### Up to Six Times More Durable Than Other Wristbands

Barcodes on Z-Band wristbands are proven to withstand water, soap, foams, alcohol and other common solvents found in healthcare. Independent laboratory testing showed that Z-Bands were two to six times more durable than leading competitors after repeated exposure to common hand sanitizers.<sup>1</sup> And that Z-Band barcodes will remain scannable for longer than the average patient stay.

### Wide Range of Wristband Colors and Sizes

The ZD510-HC accommodates Zebra's entire line of white and color Z-Band wristbands. Z-Bands are available in a variety of sizes, from infant to adult, with both adhesive or clip closures. Z-Bands are resistant to hand sanitizers and are non-irritating. You can ensure the comfort of patients with the most sensitive skin with Z-Band UltraSoft, one of the softest wristbands in the market. And Z-Bands have been determined to be MR-Safe and do not appear to present an additional hazard to patients undergoing MRI procedures.

## Designed to Improve Safety and Data Security

### Easy to Clean and Sanitize

The ZD510-HC printer's disinfectant-ready UV-resistant housing is designed to handle regular sanitizing with harsh chemicals and UV light, helping to increase patient safety.

### Medical Grade Power Supply

The ZD510-HC's power supply is IEC 60601-1 compliant for use in healthcare facilities.

### Secure solution for HIPAA compliance

The ZD510-HC's Direct Thermal printing technology simplifies HIPAA compliance — there's no ribbon to secure, incinerate or shred. Advanced security and management features to help secure patient data.

### Quiet Operation

The ZD510-HC's quiet operation won't disturb patients and other healthcare professionals.

## Comprehensive Remote Management Options

### Zebra Print DNA — Transforming Printers From the Inside

The ZD510-HC is powered by Link-OS, Zebra's robust printer operating system, and Print DNA, a combination of productivity, management, development and visibility tools. The result is a superior printing experience through better performance, simplified remote manageability and easier integration. DNA option, you can manage one printer, a group of specific printers or all printers anywhere in the world. This browser-based solution lets you instantly discover every Link-OS printer on your network — there's no need to manually track down, configure or troubleshoot printers.

### Flexible and Simple Configuration and Management Tools

In addition to optional enterprise remote management tools, we offer a full suite of complimentary management and deployment utilities. Initial setup and configuration is simple with Zebra's free printer setup utilities. Support for Bluetooth Low Energy allows administrators to wirelessly connect their mobile device, computer or laptop to the printer — no need for 'direct-connect' cables or network access.

### Protect Sensitive Patient Data with PrintSecure

This complimentary Print DNA utility makes it easy to configure over 30 settings to fine-tune printer security to protect your data and your infrastructure by creating secure printer connections and blocking unauthorized printer access.

### Seamless Integration with Your Device Management System

Get the simplicity of a single-pane-of-glass to manage all your Zebra mobile devices and printers — including the ZD510-HC. With Print DNA's MDM Connectors, you can easily integrate networked ZD510-HC printers into your existing AirWatch or SOTI MobiControl device management system.

### Maximize Uptime and Printer Visibility with Services

Ensure predictable performance and eliminate unbudgeted repair expenses with Zebra OneCare. You get unmatched technical support direct from Zebra, as well as comprehensive repair services, including accidental damage and defined repair turn-around times. And Zebra's Visibility Services provide the real-time insight into printer operational information you need to increase printer availability and optimize utilization within your workflows.

# Specifications

## Standard Features

- Quick and easy wristband cartridge loading
- Automatic print speed setting-up to 4 ips depending on installed cartridge
- Direct thermal printing of barcodes, text and graphics
- Dual-wall frame, impact-resistant plastic
- ZPL® or ZPL II® programming language
- 512 MB Flash memory
- 256 MB SDRAM memory
- Element Energy Equalizer™ (E3™) for superior print quality
- Connectivity: USB Host, USB, Ethernet, Bluetooth Low Energy
- Odometer for print-length tracking
- Illuminated media low/media out indicator
- Tool-less printhead and platen replacement
- Unicode™-compliant for multi-language printing
- Instant media calibration — no wasted media
- Head-up sensor
- XML-enabled printing — allows XML communications from information systems
- ENERGY STAR® qualified
- Link-OS
- Real Time Clock
- ZebraDesigner Essentials – easy label design tool free at [www.zebra.com/zebradesigner](http://www.zebra.com/zebradesigner)
- Two-year standard warranty

## Physical Characteristics

Dimensions	5 in. W x 7 in. H* x 9.5 in. D 127 mm W x 178 mm H* x 242 mm D * Requires 6 in./153 mm clearance above printer to load cartridge
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## Printer Specifications

Maximum Print Length	22 in./558 mm
Minimum Print Length	3 in./76 mm
Print Widths	0.75 in./19.05 mm, 1 in./25.4 mm, 1.1875 in./30.16 mm
Resolution	300 dpi/12 dots per mm
Maximum Print Speed	Healthcare: 2 in./51 mm per second Z-Band Fun and Z-Band Splash: 4 in./102 mm per second

## Media Characteristics

	Zebra offers a comprehensive range of wristband solutions for healthcare and hospitality industries.
Healthcare Wristbands	<ul style="list-style-type: none"><li>• Adhesive or clip closure</li><li>• Adult, child and infant sizes</li><li>• Barcodes on Z-Band wristbands are proven to withstand water, soaps, foams, alcohol and other common solvents found in a healthcare environment, and remain scannable for longer than the average patient stay</li></ul>
Hospitality Wristbands	<ul style="list-style-type: none"><li>• One-day and multi-day wristband options</li><li>• Seven bright colors</li><li>• Designed for amusement parks, water parks, carnivals, zoos, sporting events and resorts</li><li>• Variable print-on-demand barcoded wristbands means the wristband does not have value until printed, reducing ticket fraud</li></ul>

## Fonts And Graphics

- Character fonts: Standard bitmapped Zebra fonts: A, B, C, D, E (OCR-B), F, G, H (OCR-A), GS, P, Q, R, S, T, U, V & Ø Smooth font (CG Triumvirate™ Bold Condensed)
- Supports user-defined fonts and graphics — including custom logos
- Bitmap fonts are expandable up to 10 times, height- and width-independent. Fonts E and H (OCR-B and OCR-A), however, are not considered in spec when expanded
- Smooth-scalable font Ø (CG Triumvirate Bold Condensed) is expandable dot-by-dot, height-and width-independent, while maintaining edges to a max. 1500 x 1500 dots

## Barcode Symbolologies

Linear Barcodes	Codabar, Code 11, Code 39, Code 93, Code 128, EAN-8, EAN-13, EAN-14, GS1 DataBar™ (formerly RSS), Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Plessey, Postnet, Standard 2-of-5, UPC-A, UPC-E, UPC-A and UPC-E with EAN 2 or 5 digit extensions
Two Dimensional Barcodes	Aztec Code, Codablock, Code 49, Data Matrix, MaxiCode, MicroPDF417, PDF417, QR Code

## Print DNA Software Solutions

Development Tools	With faster, easier and smarter integration of Zebra printers with your devices and applications, your Zebra printing solutions are up and running in less time, with less cost.
Management Tools	Minimize IT effort and maximize IT control with Print DNA management tools — the easy way to add and manage any number of printers, anywhere — from a handful of printers to thousands of printers all around the world.
Productivity Tools	Reach new levels of productivity with innovations that streamline tasks and workflows, optimize device performance and solve tomorrow's printing problems today.
Visibility Tools	Regardless of whether or not you have an existing Mobile Device Management solution in place, robust visibility tools provide unparalleled insight into printer health, usage and performance.

## Product Warranty

ZD510-HC series printers are warranted against defects in workmanship and materials for a period of 2 (two) years from the date of shipment. For the complete warranty statement, please visit: [www.zebra.com/warranty](http://www.zebra.com/warranty).

## Recommended Services

Zebra OneCare SV

## Footnotes

1. For more details on the durability laboratory testing performed, please download our white paper titled "Laboratory Testing: Zebra's Z-Band Direct Thermal Antimicrobial Wristbands." Please visit: [www.zebra.com/laboratory-testing](http://www.zebra.com/laboratory-testing)  
Features are subject to availability. Specifications are subject to change without notice.

# Markets and Applications

## Healthcare

- Patient identification

## Hospitality

- Guest identification

## Environmental (Printer)

Operating Temperature	40° F to 104° F / 4.4° C to 40° C
Storage Temperature	-40° F to 140° F / -40° C to 60° C
Operating Humidity	20%-85% non-condensing R.H.
Storage Humidity	5%-85% non-condensing R.H.

## Cleaning (Printer)

Healthcare wipeable plastic is designed to withstand a variety of disinfectants, chemicals and cleaning solutions. See [zebra.com](http://zebra.com) for a full list.

## Environmental (Wristband Cartridge)

Service Temperature	-40° F to 140° F / -40° C to 60° C
Storage Temperature	32° F to 70° F / 0° C to 21° C at 35% to 50% non-condensing R.H.

## Electrical

- Universal power supply (PFC-compliant) 100—240VAC, 50—60Hz
- ENERGY STAR qualified printer

## Agency Approvals

Emissions	FCC Part 15, Subpart B, VCCI, RCM
Emissions and Susceptibility	(CE): EN 55032:2012 class B and EN 55024:2010, EN 61000-3-2, EN 61000-3-3, CISPR 32:2015
Safety	CB Scheme IEC 60950-1 and IEC 62368-1, TÜV, NRTL
Power Supply	IEC 60601-1:2012

## Options And Accessories

- ZBI 2.0™— Factory- or field-installed, this powerful programming language lets printers run standalone applications, connect to peripherals, and much more
- Factory installed wireless dual radio: 802.11ac Wi-Fi and Bluetooth 4.1
- Font packs — Asian and other international font kits

## Print DNA

This printer is supported by our powerful Print DNA suite of applications, utilities and developer tools that give our printers better performance, simplified remote manageability, and easier integration. Print DNA features may vary by model and a Support Contract may be required. For more information, please visit: [www.zebra.com/printdna](http://www.zebra.com/printdna)



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