



ZEBRA

# QLn Series Healthcare Mobile Printers

## PART OF A COMPLETE SOLUTION FOR MOBILE SPECIMEN COLLECTION

Mobile printing enables users to label bedside specimens and samples at the point of collection, reducing the risk of errors and adverse events\*



QLn220

QLn320

Zebra's QLn Series Healthcare printers are small and light enough to be easily carried on a belt clip or trolley and deliver labels at the point of care. This saves time and money and improves the patient experience.

The QLn220™ and QLn320™ Healthcare printers — an extension of Zebra's user-friendly QLn series printers — were designed specifically with healthcare facilities' needs in mind. To safeguard patient health, all tools that come into contact with patients must be clean of any potential germs, blood or other infectious liquids. However, cleaners can be harsh. Our healthcare printers are constructed using durable, disinfectant-ready materials so they can be cleaned quickly and easily between each use.

With Zebra's QLn series printers, developed especially for healthcare, you can:

- Collect bedside specimens and create an associated label directly at the point of collection
- Easily manage, maintain and upgrade all of your print devices virtually with Zebra's Link-OS® environment
- Control printer configurations and ensure consistency in format outputs and printed materials with our Profile Manager app
- Reduce service calls
- Print labels that meet the Clinical and Laboratory Standards Institute® (CLSI) harmonization standard
- Eliminate risk, save time and gain peace of mind

Trust Zebra® to help you deliver the quality care your patients expect, and the efficiency you need.

### QLn Series Healthcare Printers: Designed to Meet the Demands of Your Healthcare Facility

#### Easy to Implement and Manage

With Zebra's Link-OS environment, hospital IT staff can manage individual printers or groups of printers remotely via a web browser. Using the Profile Manager app, IT staff can expedite initial implementation, automate firmware uploads, resolve issues remotely and eliminate the time it takes to update programming on a printer-by-printer basis. And, if desired, users can alter printer settings from the front panel. Connect QLn printers to a wired Ethernet network via the QLn Ethernet cradle to enable easy, remote management.

#### Easy to Connect

The QLn series offers the most in connectivity options with faster data transfer rates and greater range. Incorporating WLAN (802.11 a/b/g/n dual band) and Bluetooth® 3.0, these printers also offer Near Field Communication (NFC) for Print Touch™ features, such as immediate support to resolve printing challenges. To meet the increasing demand for mobile printing from different operating systems, QLn printers are "Made for iPod® / iPhone® / iPad®" certified and also support Android™ and Windows® devices via Multiplatform SDK apps.

#### Easy to Carry

Weighing less than 2lbs and featuring a small footprint, the QLn220 and QLn320 are light enough to carry on a belt clip and fit easily on a cart or trolley.

#### Easy to Use

Both the QLn220 for print widths up to 2 inches and the QLn320 for 3-inch-wide printing feature an easy-to-read display with a large, high-resolution screen. A variety of proactive alerts helps keep the printers up and running, and the Link-OS Print Touch app gives hospital staff instant access to product support and how-to videos.

\*The mislabeling of samples causes an estimated 150,000 adverse events each year — in the United States alone.



For more information about QLn Series Healthcare Mobile Printers, visit [www.zebra.com/qlnhealthcare](http://www.zebra.com/qlnhealthcare) or access our global contact directory at [www.zebra.com/contact](http://www.zebra.com/contact)

## PRODUCT SPEC SHEET

### QLN SERIES HEALTHCARE MOBILE PRINTERS

#### Easy to Accessorize

Redesigned especially for healthcare, the QLn220 and QLn320 feature a more desired healthcare color palette with a matching belt clip and battery, similar to that of the HC100,<sup>™</sup> for a common look and feel.

#### Easy to Clean

Cleaning agent ingredients that are safe to use on QLn Healthcare printers:

- Isopropyl and Ethyl alcohol (including wipes)
- Ammonium
- Hydrogen peroxide
- Phosphoric acid
- Bleach / sodium hypochlorite
- Mild dish soap

Recommended cleaning agents include:

- Windex<sup>®</sup> Blue (or Isopropyl alcohol-based equivalent)
- CaviCide<sup>®</sup> (or Isopropyl and Ethyl alcohol-based equivalent)
- Lysol<sup>®</sup> Healthcare (or hydrogen peroxide-based equivalent)
- Wescodyne<sup>®</sup> (or phosphoric acid-based equivalent)
- 409<sup>®</sup> Glass and Surface Cleaner (or dimethyl benzyl ammonium chloride or other ammonium-based equivalent)

#### 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.

Zebra's IQ Color labels were developed to meet CLSI's approved standard for specimen collection and give clinicians the ability to highlight the priority status and container type in red as indicated at the left side of the label. Zebra also offers standard paper labels and moisture-resistant polypropylene labels for use with samples that need to be placed in ice upon collection.

#### Zebra OneCare Service

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 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.

#### Available Accessories

Existing accessories are compatible with this new QLn Series Healthcare printers:


- Ethernet cradle (single or 4-bay)
- IEC 60601-certified AC adapter for medical environments
- Charger
- Extended-capacity PowerPrecision+ Li-Ion battery
- Quad battery charger
- Carrying straps / cases

#### Certifications

Many of Zebra's healthcare solutions, including the QLn220 and QLn320, are certified and recommended by all of the leading Electronic Health Records (EHR) providers.

Wi-Fi Alliance Certification: Ensures compatibility with Wi-Fi<sup>®</sup> Certified network products.

# QLn Series Healthcare Specifications

PRINTER NAME	
QLn220 Healthcare	
QLn320 Healthcare	
STANDARD FEATURES	
<ul style="list-style-type: none"> <li>Includes disinfectant-ready plastics in a lighter healthcare color scheme</li> <li>Apple® iOS, Android, Windows Mobile and BlackBerry® connectivity</li> <li>Direct thermal printing of barcodes, text and graphics</li> <li>CPCL, EPL™ and ZPL® programming languages</li> <li>256 MB Flash supports downloadable programs, receipt formats, fonts and graphics (64 MB available for user storage)</li> <li>2450 mAh (nominal) 18.1 Wh removable, rechargeable PowerPrecision+ Li-Ion battery</li> <li>Built-in battery charger</li> <li>IEC 60601-certified AC adapter for medical environments</li> <li>Serial and USB ports (both support strain relief)</li> <li>Belt clip for unobtrusive and convenient printing (not compatible with extended capacity battery)</li> <li>Black mark and gap media sensing using fixed center position sensors</li> <li>Easy-to-use peel and present mode</li> <li>Label present sensor for issuing labels one at a time</li> <li>Tear bar for easy media dispensing</li> <li>Center-loading media locking for variable roll widths</li> <li>“Clamshell” design for easy media loading</li> <li>Management: Mirror, SNMP, Web server, Profile Manager, AirWatch® and Wavelink Avalanche®</li> <li>Large, easy-to-read LCD control panel (240 x 128 pixels)</li> <li>LCD can be customized using WML (text and icons)</li> <li>5-way navigation buttons, two software defined keys</li> <li>Printer alerts on the display, help menus</li> <li>Tolerance of multiple drops from 5'/1.52 m to concrete</li> <li>IP43 dust- and water-resistance rating (IP54 with soft case)</li> <li>400 MHz 32-bit ARM processor</li> <li>XML support</li> <li>Supports vertical and horizontal printing</li> <li>Printers can be used in any orientation</li> <li>QR barcode links to web-based help pages</li> <li>Zebra Print Touch simplifies Bluetooth pairing and launches web-based help pages with Near Field Communication (NFC) enabled devices</li> <li>Label odometer</li> <li>NTP (Network Time Protocol) support via Wi-Fi or Ethernet</li> </ul>	
PRINTER SPECIFICATIONS	
<b>Resolution</b>	203 dpi/8 dots per mm
<b>Memory</b>	128 MB RAM; 256 MB Flash (standard)
<b>Maximum Print Width</b>	QLn220: 1.9"/48 mm QLn320: 2.8"/72 mm
<b>Maximum Print Speed</b>	Up to 4"/102 mm per second
<b>Media Sensors</b>	Black mark and gap media sensing using fixed center position sensors; label present sensor for issuing labels one at a time
<b>Print Length</b>	Minimum: 0.5"/12.7 mm Maximum: 32"/813 mm
<b>Power</b>	 2450 mAh (nominal) 18.1 Wh removable, rechargeable PowerPrecision+ Li-Ion battery

MEDIA CHARACTERISTICS	
<b>Maximum Label and Liner Length</b>	QLn220: 0.5"/12.7 mm to 32"/813 mm QLn320: 0.5"/12.7 mm to 32"/813 mm or continuous
<b>Maximum Media Width</b>	QLn220: 0.63"/16 mm to 2.18"/55.4 mm QLn320: 1.0"/25 mm to 3.125"/79 mm
<b>Maximum Media Roll Size</b>	QLn220: 2.2"/55.9 mm OD on a 0.75"/19 mm or 1.375"/34.9 mm QLn320: 2.6"/66 mm OD on a 0.75"/19 mm or 1.375"/34.9 mm
<b>Thickness</b>	QLn220: 2.3 mil to 5.5 mil tag stock and 6.5 mil label stock QLn320: 2.3 mil to 5.5 mil tag stock and 6.5 mil label stock
<b>Media Types</b>	Die-cut labels and tags, linerless labels, receipt paper, black bar and gap sensing

OPERATING CHARACTERISTICS	
<b>Environmental</b>	Operating Temperature: 32°F to 122°F/0°C to 50°C Operating Humidity: 10% to 90% non-condensing Storage/Transportation Temperature: -13°F to 158°F/-25°C to 65°C Storage Humidity: 10% to 90% non-condensing
<b>Agency Approvals</b>	Emissions: FCC Part 15, Subpart B, EN55022 Class-B, EN60950, EN55024 and VCCI class B Susceptibility: EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, and EN61000-4-5 Safety: CE, UL, TUV, CSA

PHYSICAL CHARACTERISTICS		
	QLn220	QLn320
<b>Length</b>	6.5"/165 mm	6.8"/173 mm
<b>Width</b>	3.5"/89 mm	4.6"/117 mm
<b>Height</b>	2.75"/70 mm	3.3"/84 mm
<b>Weight (w/battery)</b>	1.25 lbs/0.57 kg	1.6 lbs/0.72 kg

Note: The Extended Capacity PowerPrecision+ Li-Ion battery option adds 0.20 lbs/0.09 kg to the weight and 0.6"/16 mm to the height of either QLn series printer.

COMMUNICATION AND INTERFACE CAPABILITIES	
<b>ZebraNet® 802.11n radio with support for:</b>	
<ul style="list-style-type: none"> <li>WEP, TKIP and AES encryption</li> <li>WPA and WPA2</li> <li>802.1x (with WEP, WPA, or WPA2)                             <ul style="list-style-type: none"> <li>EAP-FAST, EAP-TTLS, EAP-TLS, PEAP, LEAP</li> </ul> </li> <li>802.11d and 802.11i</li> <li>Simultaneous Bluetooth 3.0 dual radio</li> <li>Wi-Fi Certification</li> <li>Fast roaming using Pairwise Master Key (PMK) caching, Opportunistic Key Caching (OKC), or EAP Fast Session resumption</li> <li>Support for Ad Hoc mode</li> </ul>	
<b>Bluetooth 3.0 radio</b>	
<ul style="list-style-type: none"> <li>Security modes 1 – 4</li> <li>“Made for iPod / iPhone / iPad” certified</li> <li>Key Bonding</li> </ul>	
<b>10/100 Ethernet</b> support (via charging cradle)	
<b>Cabled Communications Specifications</b>	
<ul style="list-style-type: none"> <li>USB 2.0 full-speed interface (12 Mbps)</li> <li>Mini-B connector with optional strain relief</li> <li>Serial interface: 14-pin RS-232C port for communication to terminal or other host up to 115.2 Kbps</li> </ul>	

## Ideal for These Applications

- Specimen collection
- Blood bank management

# QLn Series Healthcare Specifications

## SOFTWARE TOOLS

### Link-OS Solutions

**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.

## FIRMWARE

CPCL, EPL and ZPL programming languages

ZBI 2.x™ — powerful programming language that lets printers run standalone applications, connect to peripherals, and much more

## BARCODE SYBLOGIES

Barcode Ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1

Linear Barcodes: Code 39, Code 93, UCC/EAN128, Code 128, Codabar (NW-7), Interleaved 2-of-5, UPC-A, UPC-E, 2 and 5 digit add-on, EAN-8, EAN-13, 2 and 5 digit add-on

2D Barcodes: PDF417, MicroPDF417, MaxiCode, QR Code, GS1/DataBar™ (RSS) family, Aztec, MSI/ Plessey, FIM Postnet, Data Matrix, TLC39

## FONTS AND GRAPHICS

Standard Fonts: 25 bitmapped, 1 smooth, scalable (CG Triumvirate Bold Condensed\*)

Optional Fonts: downloadable bitmapped / scalable fonts

International Character Sets (optional): Chinese 16 x 16 (traditional), 16 x 16 (simplified); Japanese 16 x 16, 24 x 24; Korean Mincho

\*Contains UFST® from Agfa Monotype Corporation.

## OPTIONS AND ACCESSORIES

Charging Options — Inside the Printer

- AC adapter
- Single cradle: QLn-EC — single bay Ethernet and charging cradle (not compatible with extended capacity battery)
- Quad cradle : QLn-EC4 — quad bay Ethernet and charging cradle, with internal switch and stacking port (not compatible with extended capacity battery)

Charging Options — Outside the Printer

- SC2 single battery charger
- Quad battery charger

Vehicle charger with cigarette lighter adapter

Spare batteries

Carrying Options

- Shoulder strap
- Hand strap
- Soft case (IP54 rating when used) — not compatible with extended capacity battery

Linerless printing (with silicone platen roller only)

ZBI 2.x

Printer stand for tabletop mounting

Serial and USB cables with strain relief

## PRODUCT WARRANTY

The QLn Series is warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit: [www.zebra.com/warranty](http://www.zebra.com/warranty).

## RECOMMENDED SERVICES

The Zebra OneCare Service portfolio of Essential, Select and Premier maximizes the availability and productivity of your devices. Key features include 24/7 technical support, comprehensive coverage, advance replacement and software updates. Optional Visibility Services are available. For more information go to [www.zebra.com/zebraonecare](http://www.zebra.com/zebraonecare).

For optimum print quality and printer performance, use genuine Zebra supplies. Specifications subject to change without notice.



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