Zebra® QLn™ Series Healthcare Printers

ZEBRA TECHNOLOGIES

SEE MORE. DO MORE.

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*.

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

- 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.

Ideal for These Patient Bedside Applications:

Specimen/Sample Labelling

Patient Records Labelling

Link-OS®

Made for
iPod iPhone iPad

Windows 8 Compatible

WiFi CERTIFIED

The mislabelling of samples causes an estimated 150,000 adverse events each year – in the United States alone.

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 1kg 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 48mm (2") and the QLn320 for 72mm (3") 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.

Easy to Accessorize:

Redesigned especially for healthcare, the QLn220 and QLn320 feature a more desired healthcare colour palette with a matching belt clip and battery, similar to that of the HC100,™ 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® Blue (or Isopropyl alcohol-based equivalent)
- CaviCide® (or Isopropyl and Ethyl alcohol-based equivalent)
- Lysol® Healthcare (or hydrogen peroxide-based equivalent)
- Wescodyne® (or phosphoric acid-based equivalent)
- 409® Glass and Surface Cleaner (or dimethyl benzyl ammonium chloride or other ammonium-based equivalent)

GENUINE ZEBRA™ SUPPLIES

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.

With a wide range of label materials from paper labels, perfect for identifying patient records or labelling samples which need to resist temperatures as low as -40'C, through to polypropylene labels which resist moisture and tearing.

Zebra can also offer unique IQ Color labels which enable a colour to be printed on-demand, in a pre-specified zone of the label. This gives clinicians the ability to work smarter and highlight certain samples or requests as priority.

ZebraCare™ Service

Increase printer uptime and reduce lost productivity and unbudgeted repair costs by selecting a ZebraCare Depot 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 Healthcare Series, including:

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

Certifications

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

Wi-Fi Alliance Certification: Ensures compatibility with Wi-Fi® Certified network products

SPECIFICATIONS AT A GLANCE*

Printer Name

QLn220 (Healthcare)
QLn320 (Healthcare)

Standard Features

- Includes disinfectant-ready plastics in a lighter healthcare colour scheme
- Apple® iOS, Android, Windows Mobile and BlackBerry® connectivity
- Direct thermal printing of barcodes, text and graphics
- CPCL, EPL™ and ZPL® programming languages
- 256 MB Flash supports downloadable programs, receipt formats, fonts and graphics (64 MB available for user storage)
- 2450 mAh (nominal) 18.1 Wh removable, rechargeable Li-Ion battery
- Built-in battery charger
- IEC 60601-certified AC adapter for medical environments
- Serial and USB ports (both support strain relief)
- Belt clip for unobtrusive and convenient printing (not compatible with extended capacity battery)
- Black mark and gap media sensing using fixed centre position sensors
- Easy-to-use peel and present mode
- Label present sensor for issuing labels one at a time
- Tear bar for easy media dispensing
- Centre-loading media locking for variable roll widths
- "Clamshell" design for easy media loading
- Management: Mirror, SNMP, Web server, Profile Manager, AirWatch® and Wavelink Avalanche®
- Large, easy-to-read LCD control panel (240 x 128 pixels)
- LCD can be customised using WML (text and icons)
- 5-way navigation buttons, two software defined keys
- Printer alerts on the display, help menus
- Tolerance of multiple drops from 5'/1.52 m to concrete
- IP43 dust- and water-resistance rating (IP54 with soft case)
- 400 MHz 32-bit ARM processor
- XML support
- Supports vertical and horizontal printing
- Printers can be used in any orientation
- QR barcode links to web-based help pages
- Zebra Print Touch simplifies Bluetooth pairing and launches web-based help pages with Near Field Communication (NFC) enabled devices
- Label odometer
- Real-time clock

Printer Specifications

Resolution

- 8 dots per mm/203 dpi

Memory

128MB RAM; 256MB Flash (standard)

Print Width

- QLn220: 48mm/1.9"
- QLn320: 72mm/2.9"

Print Length

- Min: 12.7mm/0.5"
- Max: 813mm/32"

Print Speed

Up to 102mm/4" per second

Media Sensors

Black mark and gap media sensing using fixed centre position sensors; label present sensor for issuing labels one at a time

Operating Characteristics

Environment

- Operating Temperature: 0°C/32°F to 50°C/122°F
- Storage/Transport Temperature: - 25°C/13°F to 65°C/158°F
- Operating Humidity: 10% to 90% non-condensing
- Storage Humidity: 10% to 90% non-condensing

Agency Approvals

- 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

Media Characteristics

Media Width

- QLn220: 16mm/0.63" to 55.4mm/2.18"
- QLn320: 25mm/1.0" to 79mm/3.125"

Media Length

- QLn220: 12.7mm/0.5"to 813mm/32"
- QLn320: 12.7mm/0.5" to 813mm/32" or continuous

Maximum Media Roll Size

- QLn220: 55.9mm/2.2"OD on a 19mm/0.75"/or 34.9mm/ 1.375"
- QLn320: 66mm/2.6" OD on a 19mm/0.75" or 34.9mm/1.375"

Media Thickness

- 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

Media Types

Die-cut labels and tags, linerless labels, receipt paper, black bar and gap sensing

Physical Characteristics

	QLn220	QLn320
Width:	89mm/3.5"	117mm/4.6"
Height:	70mm/2.75"	84mm/3.3"
Depth:	165mm/6.5"	173mm/6.8"
Weight:	0.57kg/1.25 lbs with battery	0.72kg/1.6 lbs with battery

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

Link-OS Solutions

Software Tools

- **Document Design**: Quickly design a customised 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

Fonts/Graphics/Symbologies

Fonts and Character Sets

- 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

CPCL Barcode Symbologies

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

Communication and Interface Capabilities

- ZebraNet® 802.11n option – provides 802.11a/b/g/n WLAN support with:
  - WEP (PSK only), TKIP and AES encryption
  - WPA and WPA2
  - 802.1x (with WPA or WPA2 only)
    - EAP-FAST, EAP-TTLS, EAP-TLS, PEAP, LEAP
  - 802.11d and 802.11i
  - Simultaneous Bluetooth 3.0 dual radio
  - Wi-Fi Certification
  - Fast roaming using PMK caching, CCKM or Fast Session resumption
- Bluetooth 3.0 radio
  - Security modes 1 – 4
  - "Made for iPod/iPhone/iPad" certified
  - Key Bonding
- 10/100 Ethernet support (via charging cradle)

Cabled Communications Specifications

- USB 2.0 full-speed interface (12 Mbps)
- Mini-B connector with optional strain relief
- Serial interface: 14-pin RS-232C port for communication to terminal or other host up to 115.2 Kbps

Options and Accessories

Charging Options

- Charge the battery inside the printer using:
  - AC adapter – IEC 60601-certified for medical environments
  - Single cradle
  - Quad cradle
- Charge the battery outside the printer using:
  - Single smart charger
  - Quad charger

Optional Features and Accessories

- Linerless printing (with silicone platen roller only)
- ZBI 2.x
- Spare batteries
- 4300 mAh (nominal) removable extended capacity Li-Ion battery (4-cell bump out pack)
- AC adapter
- SC2 smart battery single charger
- Quad battery charger
- Vehicle charger with cigarette lighter adapter
- QLn-EC – single bay Ethernet and charging cradle (not compatible with extended capacity battery)
- QLn-EC4 – quad bay Ethernet and charging cradle, with internal switch and stacking port (not compatible with extended capacity battery)
- Shoulder strap
- Hand strap
- Soft case (IP54 rating when used) – not compatible with extended capacity battery
- Printer stand for tabletop mounting
- Serial and USB cables with strain relief