

# Zebra® QLn™ Series



Zebra's popular QL™ family of direct thermal mobile label printers has built a highly satisfied following based upon its proven drop-resistant durability; user-friendly, productivity-boosting features; and easy integration. As Zebra's third generation of QL printers, the QLn™ series extends these QL-platform benefits to the "nth" power—whether you choose the QLn320™ for 3-inch-wide printing, or the soon-to-come 2-inch QLn220™ printer.

A new seamless, one-piece design and tempered-glass display join the printer's rubber-infused over-molding to make the lightweight printer even more durable. The QLn printer can boost your operation's productivity through a larger, sharper, easier-to-navigate display; faster, higher-quality printing; a variety of proactive alerts that help keep working printers in employees' hands; and many convenient charging accessories. And your IT department will find the QLn easier to integrate into existing environments with such features as Zebra Global Printing (coming soon), improved network performance, and ZebraLink™ support. Also prolong printer uptime and enhance operations productivity with remote Ethernet-connected printer, battery, configuration, and firmware management, all supported by ZebraLink™ tools.

## Ideal for These Applications

- **Retail**—shelf-edge labels, mark-down labels, price labels and tags, sell-by labels, transfer and return labels
- **Healthcare**—bedside specimen labels, pharmacy labels



# Easier and More Efficient to Use

Multiple enhancements deliver significant operations advantages over the previous-generation QL and QL Plus™ series mobile printers.

## Easier to Use

Reduce training requirements and speed user adoption. Increase worker productivity and process efficiency.

- Easy-to-read display with larger, higher-resolution screen **1**
- Easy-to-navigate controls and interface, including help menu and alert messages
- Intuitive peeler operation **2**
- Easy to carry and store with smaller, lighter printer design
- Faster, higher-quality printing with lower power use, through new Power Smart Print Technology™
- Higher performance
  - » Faster processing and throughput
  - » Increased memory that handles printer's advanced functions and future firmware improvements, and stores more complex fonts, graphics and images
- New, convenient charging accessories increase user and operations efficiencies

## Longer Printer Uptime

Improve operations productivity and reduce costs associated with downtime through fewer printing interruptions.

- Prevent associates from being stuck printerless in the middle of their work. The printer enables proactive maintenance by displaying printer alert messages, smart battery charge and health status, and printhead cleaning reminders and how-to's.
- Avoid the downtime and costs of unnecessarily sending the printer away for servicing. Many issues can be remotely diagnosed and resolved (including firmware updates, configuration changes, and adding new fonts or graphics) over an Ethernet connection.



# Easier to Integrate, Manage and Maintain

New features in the QLn printer make it easier and quicker to integrate into your existing network and printer environment, anywhere in the world, with no changes to software or network infrastructure needed. They help save IT time and costs—as do easier printer management and other features.

## Easier to Integrate

- Backwards compatibility with QL and QL Plus lets you upgrade to the QLn without changing media or label formats. It also allows mixed networks of QL/QL Plus and QLn products, as does the QLn printer's inclusion of the legacy CPCL programming language.
- Inclusion of ZPL® X.16 programming language (coming soon) simplifies integration with Zebra desktop and tabletop printers.
- With Zebra's Unicode™ UTF-16-compliant Global Printing Solution (coming soon) with right-to-left printing capability, print in the native language of most countries around the world, and print multiple languages on a single label.
- Integrate and use the printer in a variety of physical environments and conditions thanks to its durable design.

## Easier to Manage

- Rapidly configure, monitor and control Zebra printers on your network—maximizing uptime to get the most from your investment—with ZebraLink™ tools like the Zebra Setup Utility (for single printer setup), ZebraNet™ Bridge Enterprise for global centralized printer management, ZebraDesigner™ Drivers (for Windows® based printing), ZebraDesigner Pro (for label design), ZebraLink Multiplatform SDK and Smartphone Utility (for printing from mobile terminals and smartphones), and (coming soon) ZBI 2.0™ programming for customizing the functionality of the printer, including connecting to scanners, scales, and other peripherals.
- Also manage specific, local printer and battery issues remotely over a wired IP network via a Zebra Ethernet Cradle—keeping printers in service longer and reducing “no problem found” returns.

# Mobile A to Z

## From Accessories, to Supplies, to ZebraCare™ Plans

### Lithium-Ion Charging Accessories

#### Smart Charger

Charges standalone batteries. LEDs indicate charge and health status.

#### Ethernet Cradle

Provides Ethernet connectivity and charges the battery while it is in the printer.

#### Quad Ethernet Cradle

This quad version of the Ethernet cradle charges four printers at a time. Includes an internal Ethernet switch and second Ethernet port for stacking up to four quad cradles (manage up to 16 printers off one switch port).

#### Quad Battery Charger

Charge four standalone batteries (same unit used with the QL series).

### Carrying Straps

#### Hand Strap

Allows printer to be hand-carried.

#### Shoulder Strap

Allows printer to be carried over the shoulder.

### Cases

Add an extra layer of protection for harsh environments with a soft case. While inside the case, the printer is IP54-rated for resistance to windblown water and dust. Case provides openings for changing the media and batteries, and all connectors are accessible. Includes a shoulder strap.

### Spare Lithium-Ion Batteries

Spare batteries on hand ensure quick battery replacement to extend the printer's operating time.

### 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.



### 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.

**ZebraCare™**



# Specifications at a Glance\*

## Printer Name

QLn320  
QLn220 (coming soon)

## Standard Features

- Direct thermal printing of bar codes, text and graphics
- CPCL and ZPL® [future] programming languages
- 256 MB Flash supports downloadable programs, receipt formats, fonts, and graphics
- 2.45 AH removable Li-Ion smart battery
- Built-in battery charger
- Black mark and gap media sensing using fixed center position sensors
- Easy to use peel and present mode
- Label present sensor for issuing labels one at a time
- Tear bar for easy receipt dispensing
- Center-loading media locking for variable roll widths
- "Clamshell" design for easy media loading
- Management: Mirror, SNMP, Web server (with customizable HTML pages), Wavelink Avalanche® [future firmware update]
- Large, easy to read LCD control panel 240 x 128 pixels
- LCD can be customized 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)
- Label odometer
- Real-time clock

## Printer Specifications

### Resolution

203 dpi/8 dots per mm

### Memory

128 MB RAM; 256 MB Flash (standard)

### Print width

2.9"/72 mm

### Print length

Min: 0.5"/12.7 mm

Max: 32"/813 mm

### Print speed

Up to 4"/100 mm per second

### Media sensors

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

## Operating Characteristics

### Environment

- Operating Temperature: -4° F/-20° C to 122° F/50° C
- Storage/Transport Environment: -13° F/-25° C to 158° F/65° C
- 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

1.0"/25 mm to 3.125"/79 mm

### Media length

0.5"/12.7 mm to 32"/813 mm or continuous

### Maximum media roll size

2.6"/66 mm OD on a 0.75"/19 mm or 1.375"/34.9 mm

### Media thickness

2.3 mil to 6.5 mil

### Media types

Die-cut, roll-fed, receipt, linerless, black bar, black mark

## Physical Characteristics

Width: 4.6"/117 mm

Height: 3.3"/84 mm

Depth: 6.8"/173 mm

Weight: 1.6 lbs/0.72 kg with battery

## ZebraLink Solutions

### Software

- ZebraDesigner™ Pro
- ZebraDesigner
- ZebraNet™ Bridge Enterprise
- ZebraDesigner Driver
- Zebra Setup Utility
- Multiplatform Software Development Kit

### Firmware

- CPCL and ZPL [future] programming languages
- ZBI™ 2.x—Powerful programming language that lets printers run standalone applications, connect to peripherals, and much more [future firmware update]

## Fonts/Graphics/Symbologies

### Fonts and character sets

- Five resident scalable, rotatable fonts available from 12-48 pt.
- Downloadable soft fonts
- Optional international character sets

### Bar code symbologies

- Bar Code Ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1
- Linear Bar Codes: 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

- 802.11b/g radio with support for:
  - WEP, TKIP, and AES encryption
  - EAP-FAST, EAP-TTLS, EAP-TLS, PEAP, LEAP
- 802.1x
- WPA and WPA2
- 802.11d and 802.11i
- Bluetooth® 2.1 radio
  - Security modes 1 - 4
- 10/100 Ethernet support (via docking 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
  - Single cradle
  - Quad cradle
- Charge the battery outside the printer using:
  - Single charger
  - Quad charger

### Optional Features and Accessories

- Linerless printing (with silicone platen roller only)
- ZBI 2.x—Powerful programming language that lets printers run standalone applications, connect to peripherals, and much more [future firmware update]
- Spare batteries
- AC adapter
- SC2 smart battery single charger (coming soon)
- Quad battery charger
- QLn-EC—single bay Ethernet and charging cradle
- QLn-EC4—quad bay Ethernet and charging cradle, with internal switch and stacking port (coming soon)
- Shoulder strap
- Hand strap
- Soft case (IP54 rating when used)
- Serial and USB cables with strain relief

\*Specifications subject to change without notice.

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