Zebra® QLn™ Series

SEE MORE. DO MORE.

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 – whether you choose the QLn320™ model for 72mm-wide printing or the QLn220™ model for print widths up to 48mm.

A new, seamless, one-piece design and tempered-glass display join the printer's rubber-infused over-moulding to make this 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 printer easier to integrate into existing environments with features such as Zebra Global Printing, improved network performance – including 802.11n wireless LAN capability for more robust and reliable connectivity and throughput – and ZebraLink™ support.

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

Transportation & Logistics: shipping/receiving labels, pallet/case labels, cross-docking labels, warehouse management labels

EASIER AND MORE EFFICIENT TO USE

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

Easier to use

Reduce training requirements and accelerate user adoption. Increase productivity and efficiency.

- Easy-to-navigate controls and interface, including help menu and alert messages
- Smaller, lighter printer design that is easy to carry and store
- Faster, higher-quality printing with lower power use, thanks to 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 that increase user and operational efficiencies

Longer printer uptime

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

- Prevent associates from being stuck with no printer 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 how-to messages
- 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

Easy-to-read display with larger, higher-resolution screen

Intuitive peeler operation

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.

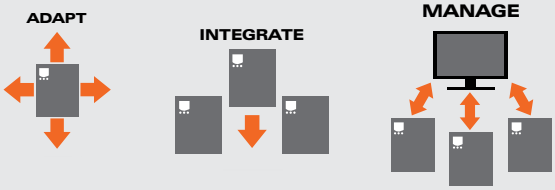
Easier to integrate

- Backwards compatibility with QL and QL Plus models lets you upgrade to the QLn printer 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™ programming language simplifies integration with Zebra desktop and tabletop printers
- With Zebra's Unicode™ UTF-16-compliant Global Printing Solution with right-to-left printing capability, it's possible to print in the native language of most countries around the world, and print multiple languages on a single label
- You can integrate and use the printer in a variety of physical environments and conditions thanks to its durable design
- The QLn series printers offer 802.11n wireless LAN capability. This provides more robust and reliable connectivity, which allows for a greater throughput in environments where users need to transmit larger blocks of data. Zebra's 802.11n solution has dual-band support (5GHz and 2.4GHz) and is fully compatible with 802.11a and 802.11b/g standards. This means that end users who have encountered a crowded 802.11b/g network can now easily move their business operations to the less crowded 5GHz band using Zebra's wireless connectivity solution. Zebra's 802.11n solution supports channel bandwidths of 20MHz and 40MHz contributing to better throughputs (unlike other solutions in the market that only support 20MHz channel widths)

Easier to manage

- Rapidly configure, monitor and control Zebra printers on your network – maximising 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 centralised 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 ZBI 2.x programming for customising 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. The Ethernet Cradle allows all printer configurations to be remotely managed, including serial and Bluetooth® (which would not otherwise be possible)
- With the mirror function, automatically update printer firmware and/or configuration from a file server over either 802.11 or Ethernet interfaces
- Manage QLn printers using most popular third-party management software solutions. The printers also fully support Simple Network Management Protocol (SNMP)

ZebraLink™



MOBILE A TO Z

FROM ACCESSORIES, TO SUPPLIES TO ZEBRACARE™ PLANS

Lithium-ion charging accessories

Ethernet Cradle
Connect QLn printers to your wired Ethernet network via the QLn Ethernet Cradle to enable easy remote management by your IT or operations staff – helping to ensure each printer is operating optimally and is ready for use. The Ethernet Cradle can communicate over 10Mbps or 100Mbps networks using auto-sense.

The single-bay QLn Ethernet Cradle also charges the battery whilst it is in the printer, while the four-bay version (with optional wall-mount kit) charges four printers at a time. The four-bay version includes an internal Ethernet switch and second Ethernet port, so you can link and manage 4 four-bay QLn Ethernet Cradles (a total of 16 printers) from one port.

The printer remains fully functional so you can print whilst it is docked in either cradle. The cradle's LED lights indicate DC power and Ethernet-link status.

Remote printer management over your Ethernet allows:

- Battery management – monitor battery health to simplify central management of your spare battery pool
- Firmware management – update printer firmware, eliminating the need for IT staff to travel to the local user site, or for the printer to be despatched to an off-site service centre
- Print management – update templates, fonts and graphics in order to print new label formats
- Device management – update startup (such as config.sys), WML (front panel), or HTML (browser) files to enhance or change configuration and status collection
- Network management – update encryption keys or certificate files to maintain the highest level of security
- Problem resolution – troubleshoot local printer issues that may otherwise require the printer to be sent away for repair

Single-bay QLn Ethernet Cradle

Four-bay QLn Ethernet Cradle

What comes with the unit?

Unit with AC adaptor: Cradle, AC adaptor, power cable and document CD including Cradle user manual and installation guide

Single-bay unit without AC adaptor: Cradle and document CD including Cradle user manual and installation guide (AC adaptor can be purchased separately)

AC adaptor

Connect the AC adaptor to your QLn printer and mains socket to charge the printer's smart battery whilst in the printer. The printer can print labels and perform other functions during charging.

Shown with printer for reference purposes; printer is not included

Smart charger

The smart charger will fully charge a single standalone QLn smart battery in less than four hours. In addition to indicating battery charge status, it indicates battery health, allowing you to more accurately manage your spare battery pool. Specifically, LEDs show whether the battery is "good," has a "diminished capacity," is "past useful life," or is "unusable" and should be replaced. The smart charger comes with a charging base and power cable.

Shown with printer for reference purposes; printer is not included

Extended-capacity lithium-ion smart battery

The extended-capacity Li-ion smart battery provides twice the battery capacity of the standard smart battery, providing double the power for increased uptime. There's no need to upgrade your existing QLn printer – you can purchase this as a standalone accessory to use with your current QLn220 or QLn320 model. Alternatively, you can order it as a configurable printer option so your printer ships ready to go with this powerful accessory – the choice is yours.

Quad battery charger

The quad battery charger is designed to simultaneously charge up to four QLn smart batteries in about three hours. Lights on the charger indicate when individual batteries are 80 per cent charged and when fully charged. Note that the quad battery charger does not indicate battery health (unlike the smart charger). It comes with the charging unit, a power supply, and power cable.

Carrying straps/cases

Hand strap
Allows the printer to be carried by hand.

Shoulder strap
Allows the printer to be carried over the shoulder.

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

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 exactly the same materials every time so you always get crisp, readable and scannable output without needing to adjust the printer darkness setting between rolls.

ZebraCare Services

Increase printer uptime (and reduce lost productivity and unbudgeted repair costs) by selecting a ZebraCare Services 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.

SPECIFICATIONS AT A GLANCE*

Printer name

QLn220
QLn320

Standard features

- Direct-thermal printing of barcodes, text and graphics
- CPCL and ZPL programming languages
- 256MB flash supports downloadable programs, receipt formats, fonts and graphics
- 2,330mAh (nominal) 17.2Wh removable Li-ion smart battery
- Built-in battery charger
- 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 receipt dispensing
- Belt clip for unobtrusive and convenient printing (not compatible with extended-capacity battery)
- Centre-loading media locking for variable roll widths
- Clamshell design for easy media loading
- Management: Mirror, SNMP, Web server (with customisable HTML pages), Wavelink Avalanche®
- Large easy-to-read LCD control panel (240 x 128 pixels)
- LCD can be customised using WML (text and icons)
- Five-way navigation buttons, two software-defined keys
- Printer alerts on the display, help menus
- Tolerance of multiple drops from 1.52m/5' to concrete
- IP43 dust- and water-resistance rating (IP54 with soft case)
- Label odometer
- Real-time clock

Printer specifications

Resolution

- 8 dots per mm/203dpi

Memory

128MB RAM; 256MB flash (standard)

Print width

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

Print length

- Minimum: 12.7mm/0.5"
- Maximum: 813mm/32"

Print speed

- Up to 100mm/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: -20°C/-4°F to 50°C/122°F
- Storage/Transport environment: -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, EN 55022 Class-B, EN 60950, EN 55024 and VCCI class B
- Susceptibility: EN 55024, EN61000-4-2, EN 61000-4-3, EN 61000-4-4, and EN 61000-4-5
- Safety: CE, UL, TÜV, 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" O.D. on a 19mm/0.75" or 34.9mm/1.375" I.D. core
- QLn320: 66mm/2.6" O.D. on a 19mm/0.75" or 34.9mm/1.375" I.D. core

Media thickness

- QLn220: 2.3 mil to 5.5 mil
- QLn320: 2.3 mil to 6.5 mil

Media types

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

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/1.35lb with battery	0.72kg/1.6lb with battery

Note: The extended-capacity Li-ion smart-battery option adds 0.09kg/0.20lb to the weight and 16mm/0.6" to the height of either QLn series printer.

ZebraLink Solutions

Software

- ZebraDesigner Pro
- ZebraDesigner
- ZebraNet Bridge Enterprise
- ZebraDesigner Driver
- Zebra Setup Utility
- Multi-platform Software Development Kit

Firmware

- CPCL 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

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

Barcode symbologies

- Barcode ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1
- Linear barcodes: Codabar (NW-7), Code 39, Code 93, Code 128, EAN-8, EAN-13 (2 and 5 digit extensions), Interleaved 2-of-5, UCC/EAN-128, UPC-A, UPC-E (2 and 5 digit extensions) MSI/Plessey, FIM/Postnet
- Two-dimensional: Aztec Code, Data Matrix, GS1 DataBar™ (RSS), MaxiCode, MicroPDF417, PDF417, QR Code, TLC 39

Communication and interface capabilities

- 802.11b/g and 802.11a/b/g/n radios 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
- Dual 802.11b/g/n and Bluetooth 3.0 radio (coming soon)
- 10/100 Ethernet support (via docking cradle)

Cabled communications specifications

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

Options and accessories

Charging options

- Charge the battery inside the printer using: AC adaptor; Single cradle; Quad cradle
- Charge the battery outside the printer using: Smart charger; Quad charger

Optional features and accessories

- Linerless printing (with silicone platen roller only)
- ZBI 2.x
- Spare batteries
- 4300mAh (nominal) 31.0Wh removable extended-capacity Li-ion smart battery
- AC adaptor (ENERGY STAR®-qualified)
- SC2 smart battery single charger (ENERGY STAR-qualified)
- Quad battery charger
- 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
- Serial and USB cables with strain relief

*Specifications subject to change without notice.

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