Zebra® QLn™ series

Zebra's popular QL™ series 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™ for three-inch-wide printing, or the soon-to-come two-inch QLn220™ printer.

A new design joins the printer's tempered-glass display and 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 and ZebraLink™ support. ZebraLink Tools help reduce "no problem found" service returns thanks to their remote Ethernet-connected printer-, battery-, configuration- and firmware management capabilities.

Ideal for:

- **Retail:** shelf-edge labels, markdown labels, price labels and tags, sell-by labels, transfer and return labels

- **Healthcare:** bedside specimen labels, pharmacy labels

Get the most out of your Zebra printer: put genuine Zebra supplies in

Zebra offers a wide range of supplies for your QLn printers, all made to a high standard and suitable for a variety of applications.

- Manufactured exclusively for Zebra printers
- Laboratory-tested for optimum performance
- Proven to minimise wear and tear on printheads

▶ **For more information visit www.zebra.com**

QLn series and accessories

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-read display with larger, higher-resolution screen
- Easy-to-navigate controls and interface, including help menu and alert messages
- Intuitive peeler operation
- Easy to carry and store with smaller, lighter printer design
- Faster, quieter, 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 increase user and operational efficiencies

Longer printer uptime

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

- Prevent users from being stuck with no printer in the middle of their work. This printer enables proactive maintenance by displaying printer alert messages, smart battery charge and health status, printhead-cleaning reminders and 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

Easier to integrate, manage and maintain

New features of 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 printers lets you upgrade to the QLn series 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 simplifies integration with Zebra desktop and tabletop printers
- With Zebra's Unicode™ UTF-16-compliant Global Printing Solution 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 and maintain

- 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 (coming soon) ZBI 2.0™ 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.

Accessories

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 (to 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.

ZebraCare™ Services

Increase printer uptime and reduce lost productivity and unbudgeted repair costs by selecting a ZebraCare service agreement. A cost-effective means of planning and budgeting for 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*

Standard features
- Direct-thermal printing of bar codes, text and graphics
- 203dpi (8 dots/mm) resolution
- Print speed: up to 100mm (4") per second
- CPCL and ZPL (future) programming languages
- Resident fixed and scalable fonts
- 400MHz 32-bit ARM processor with 128MB RAM
- 256MB flash supports downloadable programs, receipt formats, fonts and graphics
- Serial and USB ports (both support strain relief)
- 2.45Ah 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
- Supports vertical and horizontal printing
- Printer can be used in any orientation
- 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® (future firmware update)
- 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
- Label odometer
- Real-time clock

Environmental specifications
- Operating temperature: -20°C (-4°F) to 50°C (122°F)
- Storage temperature: -25°C (-13°F) to 65°C (158°F)
- Operating humidity: 10% to 90% non-condensing
- Storage humidity: 10% to 90% non-condensing
- IP rating: 43 (IP54 with soft case)

Agency approvals
- **Emissions:** FCC Part 15, Subpart B, EN 55022 Class B, EN 60950, EN 55024 and VCCI Class B
- **Susceptibility:** EN 55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4 and EN 61000-4-5
- **Safety:** CE, UL, TUV, CSA

Media specifications
Note: For optimum print quality and printer performance, use of genuine Zebra supplies is recommended.

Media width
- QLn220: 16mm (0.63") to 55.4mm (2.18")
- QLn320: 25mm (1.0") to 79mm (3.125")

Max. print width
- QLn220: 48mm (1.9")
- QLn320: 72mm (2.9")

Media thickness
- QLn220: 0.0584mm (2.3 mil) to 0.1397mm (5.5 mil)
- QLn320: 0.0584mm (2.3 mil) to 0.1651mm (6.5 mil)

Label length
- QLn220: 12.7mm (0.5") to 813mm (32")
- QLn320: 12.7mm (0.5") to 813mm (32")

Media roll I.D.
- QLn220: 19mm (0.75") or 34.9mm (1.375")
- QLn320: 19mm (0.75") or 34.9mm (1.375")

Media roll O.D.
- QLn220: 55.9mm (2.2")
- QLn320: 66mm (2.6")

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

Physical specifications
Height
- QLn220: 70mm (2.75")
- QLn320: 84mm (3.3")

Width
- QLn220: 89mm (3.5")
- QLn320: 117mm (4.6")

Depth
- QLn220: 165mm (6.5")
- QLn320: 173mm (6.8")

Weight (with battery)
- QLn220: 0.57kg (1.25lb)
- QLn320: 0.72kg (1.6lb)

ZebraLink Solutions
Software
- ZebraDesigner Pro
- ZebraDesigner
- ZebraNet Bridge Enterprise
- ZebraDesigner Driver
- Zebra Setup Utility
- Multiplatform Software Development Kit
- ZebraNet Utilities v7.0
- Zebra Universal Driver

Networking
- 802.11b/g radio
- 10/100 Ethernet support (via docking cradle)

Firmware
- CPCL and ZPL (future) programming languages
- ZBI 2.0: Powerful programming language that lets printers run standalone applications, connect to peripherals and much more (future firmware update)

Fonts/Graphics/Symbologies
Font 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 16x16 (traditional), 16x16 (simplified), 24x24 (simplified); Japanese 16x16, 24x24; Korean Mincho, Meong; Russian
- Scalable text feature
- Standard resident fonts can be rotated in 90° increments
- Supports user-defined fonts and graphics and logos
- Allows text magnification 1–16 times the original size
- Proportional and fixed-width fonts

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

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)

Internet protocols (over 802.11 or Ethernet)
- UDP/TCP, DHCP/BootP, FTP/Mirror, HTTP, SMTP/POP3, Telnet, LPD, SNMP

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 single charger, quad charger

Optional features
- 802.11b/g radio
- Bluetooth 2.1 radio
- Security modes 1–4
- 10/100 Ethernet support (via docking cradle)
- Linerless printing (with silicone platen roller only)
- ZBI 2.0: Powerful programming language that lets printers run standalone applications, connect to peripherals, and much more (future firmware update)

Accessories
- Spare batteries
- AC adaptor
- SC2 smart battery single charger
- 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
- Shoulder strap
- Hand strap
- Soft case (IP54 rating when used)
- Serial and USB cables with strain relief