



Zebra® QL™ Series

Mobile Printing for Businesses on the Go

Rugged mobile printers to meet your changing business needs.

Need a printing partner tough enough for the concrete jungle? From warehouse floors to parking lots, there are no printers more durable than the QL series from Zebra.

The QL series of direct thermal printers have been designed with the most advanced technology in rubberized over-molding to maintain rugged construction and minimal weight. With center-loading media, smart battery monitoring and an optional LCD, they provide user-friendly options to keep your business moving.

QL series mobile printers enabled with secure wireless options are easily integrated into your infrastructure. Just a glance at the optional LCD, and you can read your network settings, or check the communications status. In addition, each printer can be assigned a unique IP address for monitoring over the network, and messages can be sent to the printer using the POP3 functionality. All of these features make the QL printer an integral part of your network environment.

The QL series' QuickLink™ modules, in Bluetooth technology, 802.11 or 802.11b, offer the flexibility to adjust to a wide range of connectivity needs. As needs change, so can QuickLink modules.

The QuickLink Connection

Choose the QuickLink connectivity module that suits your needs:

- 802.11b—the latest and greatest WLAN connectivity
- Bluetooth—low-power consumption short-range connectivity
- Cable-ready—connect to a wider variety of terminals than any other mobile printer
- 802.11—frequency hopping radio to help transition former users of the Encore 3N™.



Connect with it. Count on it.™

QL™ Series



► Meet the QL Series!

Connected today, connected tomorrow, constructed to last!

With the most feature-rich offering of any mobile printer in the market:

► Rugged, Lightweight Printer

- Rubber infused plastic over-mold design for tough conditions
- Damage-resistant to multiple drops of up to five feet
- Weight of two pounds or less for effortless mobility

► Load and Go!

- Center-locking media loading
- Engage the easy-to-use peel and present function with the flip of a bar

► QuickLink™ Connectivity

Modules on the QL can be upgraded quickly and easily for added flexibility and capabilities, such as Bluetooth, 802.11 or 802.11b connectivity.



Experience the Virtual QL 320 at www.zebra.com/QL320.



Applications for the QL Family

DISTRIBUTION APPLICATIONS

Forklift-Mounted Printing

With the QL 420's mobile mount option, forklift operators can print product identification, bin, and shipping labels at the point of application—without needing to run back to the shipping office to pick up labels.

HEALTHCARE APPLICATIONS

Specimen Labels

Healthcare facilities can print specimen labels at the point of collection, and also print a bar coded label for the patient's chart, reducing the risk for dangerous misinformation.

Retail Pharmacy Labels

Retail pharmacies can scan the prescribed medicine and print bar coded labels with patient information when using the QL anywhere in the pharmacy, minimizing the risk for wrongly filled prescriptions.

MANUFACTURING APPLICATIONS

Pallet Labeling

When breaking into a pallet to remove a partial order, employees can label the partial, and re-label the pallet in real-time to maintain inventory accuracy.

RETAIL APPLICATIONS

Price Marking

By printing and applying markdown labels at the location of the product via wireless LAN, retailers can respond to sensitive market changes more frequently.

Shelf Labeling

Use a QL to print one or multiple shelf labels at the point of application as required—avoiding waste and improving efficiency.

ROUTE ACCOUNTING/FIELD SERVICE APPLICATIONS

Postal/ Delivery Verification Slips

Use a QL printer to print delivery receipts at the point of transaction, confirming the actual items that transferred possession.

SHIPPING AND RECEIVING APPLICATIONS

Receiving Verification/Inventory Updates

Apply QL-printed bar code labels as deliveries are received to record product arrival, and scan these labels throughout the process for tracking purposes.

QL™ Series



QL 220™

Take 2-inch label, ticket, and receipt printing where stationary and larger mobile printers dare not go—whether it's down store aisles, on hospital rounds, or onto retail pharmacy counters. Strap or clip on the sleek, 1.04-pound QL 220 network-addressable label/receipt mobile printer and move with ease!

MAXIMUM PRINT AREA

Width: 1.89" /48.0 mm

Length (with standard memory): 32" /813 mm

RESOLUTION

203 dpi/8 dots per mm

MAXIMUM PRINT SPEED

3" /76.2 mm per second

MEMORY

1 MB SRAM; 1 MB Flash (standard)

2 MB SRAM; 2 MB Flash (optional)

PHYSICAL CHARACTERISTICS

Width: 3.57" /90.7 mm

Depth: 2.96" /75.2 mm

Height: 7.15" (w/o belt clip)/181.6 mm

Weight (with battery): 1.04 lbs./0.47 kg

MEDIA SPECIFICATIONS

Label and liner width: .63" /16.0 mm to 2.18" /55.4 mm

QL 320™

Zebra's popular QL 320 mobile printer, for print widths up to 3 inches, was the first to offer the flexibility of QuickLink™ radio modules to meet evolving needs and wireless standards. Count on its rugged design to endure tough manufacturing or shipping/receiving environments.

MAXIMUM PRINT AREA

Width: 2.9" /73.7 mm

Length (with standard memory): 16" /406 mm

RESOLUTION

203 dpi/8 dots per mm

MAXIMUM PRINT SPEED

4" /101.6 mm per second

MEMORY

1 MB SRAM; 1 MB Flash (standard)

2 MB SRAM; 2 MB Flash (optional)

PHYSICAL CHARACTERISTICS

Width: 4.6" /116.8 mm

Depth: 3.1" /78.7 mm

Height: 8.0" /203.2 mm

Weight (with battery): 1.65 lbs./748 g

MEDIA SPECIFICATIONS

Label and liner width: 1.5" /38.1 mm to 3.12" /79.2 mm

QL 420™

Bring the flexibility of wireless printing to your 4-inch label or receipt applications with Zebra's QL 420 mobile printer. Ruggedly built to survive the rigors of warehousing, distribution, and route accounting, the QL 420 offers a mobile mount option to allow printing in a forklift or vehicle.

MAXIMUM PRINT AREA

Width: 4.09" /103.9 mm

Length (with standard memory): 20" /508 mm

RESOLUTION

203 dpi/8 dots per mm

MAXIMUM PRINT SPEED

3" /76.2 mm per second

MEMORY

1 MB SRAM; 1 MB Flash (standard)

2 MB SRAM; 2 MB Flash (optional)

PHYSICAL CHARACTERISTICS

Width: 6.0" /152.4 mm

Depth: 3.0" /76.2 mm

Height: 7.5" /190.5 mm

Weight (with battery): 2 lbs./907 g

MEDIA SPECIFICATIONS

Label and liner width: 1.5" /38.1 mm to 4.12" /104.6 mm

For More Information

Contact your Zebra representative for additional printer specifications. To learn more about innovative mobile printers, call +1 800.423.0442, or visit our Web site www.zebra.com.



Easily upgrade your QL to the latest in connectivity with QuickLink modules.

QL™ Series



QL Series Optional Accessories:

With Zebra mobile accessories, users enjoy the utmost benefit from their mobile printing solution. Whether using our chargers or cases, users find Zebra quality extends beyond printers and into everything we offer.

Cases



Add dust and rain protection to your QL mobile printer with an environmental case. By adding an extra layer of protection, your printer will be well prepared for the harshest conditions.

QL Stands



Users of the QL series of mobile printers can purchase a resting spot for their printer while not in use. These convenient printer stands also are a useful spot to place the printer while toggling through options or programming the printer.

QL printers can also be configured with a kickstand option, as can be seen above on the QL 220, which props the printer on a flat surface. The kickstand can also be flipped upward for use as a carrying handle.

Mobile Mounts

Using the QL 420 mobile mounting kit, users can place a mount in their forklift or truck to provide convenient storage for their QL 420 while on the move. A fanfold media bin can also be attached to this mount, to extend the media capacity of the QL 420.

QL Series Lithium-Ion Chargers

Fast Charger: Charges a single QL series Li-Ion battery at a time in approximately 2–5 hours.

Quad Charger: Charges up to 4 QL series Li-Ion batteries at a time in approximately 2–5 hours.

Specifications at a Glance*

STANDARD FEATURES

Print method: Direct thermal
Rubber infused plastic over-mold design for tough conditions
Battery monitoring via a battery low indicator light or gauge on the optional LCD
Lithium ion battery
"Clamshell" design and center locking media loading
Backward compatible with Encore™ and Cameo™ media and cables
Label Vista™ and Windows® printer drivers
Quick Flip Peel and Present Mode

OPERATING CHARACTERISTICS

Environment
Operating Temp.: 5° F/-15° C to 122° F/50° C
Operating Temp. (w/LCD): 32° F/0° C to 122° F/50° C
Storage Temp.: -13° F/-25° C to 158° F/70° C
Storage Temp. (w/LCD): -4° F/-20° C to 158° F/70° C
Operating Humidity: 10% to 80% non-condensing
Storage Humidity: 10% to 90% non-condensing
Water resistant to IP14 standards

Electrical
7.2 V Lithium ion battery (2100 Ah QL 220, QL 320; 4200 Ah QL 420)
External charger options

Communication Interface Capabilities
8 pin din (RS232C)
Selectable baud rate: 9600 to 115.2 Kbps
Xon/Xoff or Hardware flow control
Bluetooth option
Wireless LAN option

Agency Approvals
FCC and CE Class B compliance; design certified by CSA; CB Scheme report; NOM certified; C-Tick clearance

Printer Control Languages
CPCL-Native
ZPL II®-X.8 emulation (optional)
EPL2™-emulation (optional)

MEDIA CHARACTERISTICS

Labels/Receipts
Max. Roll Size (O.D.):
QL 220: 2.2" /55.9 mm
QL 320/QL 420: 2.6" /66.7 mm
Core Size (QL 220/320/420): Interchangeable 3/4" /19.1 mm or 1-3/8" /34.9 mm
Tag Receipt Thickness: 2.5 mil to 6.0 mil
Label Thickness: 2.5 mil to 6.5 mil
Media Type: Roll-fed, die-cut, linerless, receipt, fan-fold (QL 420)
For optimum print quality and printer performance, use Genuine Zebra® Supplies.

FONTS/GRAPHICS/SYMBOLOLOGIES

Fonts and Character Sets
Five resident scalable, rotatable fonts available from 12-48 pt.
Downloadable soft fonts from Label Vista software
Optional international character sets

Graphic Features
Graphics, line and box drawing features; PCX and bitmap supported

Bar Code Symbolologies
Code 39, Code 93, Code 128; Codabar; Interleaved 2-of-5; FIM Postnet; UPC-A, UPC-E, 2 & 5 digit add-on; EAN-8, 13, 2 & 5 digit add-on; MSI/Plessey; UCC/EAN 128
2-Dimensional: PDF417; MaxiCode

OPTIONS AND ACCESSORIES

LCD control panel
802.11b wireless local area network (WLAN) or Bluetooth
802.11 WLAN (QL 320/QL 420 only)
IrDA (QL 320/QL 420 only)
Up to 2 MB SRAM; 2 MB Flash
Patent pending media width auto-sensing feature
Linerless printing
Spare lithium ion battery packs
Battery chargers (AC/DC)
International character sets
Label Vista software for receipt and label design and font creation
Fanfold media bin (QL 420)
Mobile mount (QL 420)

*Specifications listed are for base model printers with standard features only unless otherwise noted. Specifications subject to change without notice. All product and brand names are trademarks of their respective companies. All rights reserved.



HEADQUARTERS Zebra Technologies International, LLC **PHONE:** +1 847 793 2600 or +1 800 423 0442 **FAX:** +1 847 913 8766
ADDRESS: 333 Corporate Woods Parkway, Vernon Hills, IL 60061-3109 U.S.A. **WEB:** www.zebra.com

OTHER LOCATIONS **USA:** California, Florida, Rhode Island, Wisconsin **EUROPE:** Denmark, France, Germany, Italy, South Africa, United Kingdom **ASIA-PACIFIC:** Australia, China, Japan, Singapore, South Korea **LATIN AMERICA:** Argentina, Brazil, Mexico **MIDDLE EAST:** United Arab Emirates



An ISO 9001 registered company
©2003 ZIH Corp.
Printed in U.S.A.
#11370L Rev. 2 (11/03) 10M