



## 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 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



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 or 802.11b connectivity.



Experience the Virtual QL 320 at [www.zebra.com/QL320](http://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



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



## Specifications at a Glance\*

### 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.

### 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  
 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.