# 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 has 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.

**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

**Zebra**

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 5 feet
- Weight of 2 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.**

## Applications for the QL Family

### DISTRIBUTION APPLICATIONS

**Forklift-Mounted Printing**
With the QL 420's mobile mount option, fork-lift 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: 1.25"/31.75 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: 2.0"/50.8 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 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 kick-stand 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.: 5º F/-15º C to 122º F/50º C
Operating Temp. (w/LCD): 32º F/0º C to 122º F/50º C
Storage Temp.: -13º F/-25º C to 158º F/70º C
Storage Temp. (w/LCD): -4º F/-20º C to 158º F/70º C
Operating Humidity: 10% to 80% non-condensing
Storage Humidity: 10% to 90% non-condensing
Water resistant to IP14 standards

### Electrical
7.4 V Lithium ion battery (2.1 Ah QL 220, QL 320; 4.2 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/SYMBOLOGIES

### 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 Symbologies
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 subject to change without notice.