



## Zebra® QL™ Series

Mobile Printing For Businesses On The Go

### **Rugged mobile printers to meet your changing business needs.**

The QL series of direct thermal mobile printers have been designed with the most advanced technology in rubberized over-molding to maintain both 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.

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 (Symbol® Compact Flash or Cisco® PCMCIA)
- Bluetooth—add mobile printing to your work group or piconet (ad hoc network of up to seven Bluetooth devices)
- 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).



QL 320™

### RETAIL APPLICATIONS

#### Price Marking

Scan the product's bar code at the shelf. Any price change comes back over your Wireless LAN to the QL mobile printer to print a markdown label. By easily bringing markdowns directly to the product, you can respond to sensitive market changes more frequently.

#### Shelf Labeling

Scan the product with a handheld terminal or scanner and use a QL to print one or multiple shelf labels at the point of application as required—avoiding waste and improving efficiency.

#### Inter-Store Transfers

When one store runs out of product, it calls over to another store. Using the wireless network, the QL mobile printer can access the store's inventory management system to print interstore transfer labels, ensuring inventory accuracy.



QL 320

### MANUFACTURING APPLICATIONS

#### Pallet Labeling

When breaking into a pallet to remove a partial order, label the partial, and re-label the pallet to show the inventory debit. These real-time changes help maintain inventory accuracy.

#### Product Identification

Provide the product label information required by different OEMs. The QL printers' high-resolution, thermal printhead guarantees consistently scannable bar codes and crisp graphics and text.

#### Work-in-Process Tickets

Direct assembly, control quality, and update inventory by scanning a QL-printed work-in-process ticket at each station. Apply a serial number label to the end product and scan along with the ticket to ensure product/component traceability.

# QL™ Series



## QL 420™

### DISTRIBUTION APPLICATIONS

#### Pick Tickets

Raise picking efficiency and accuracy. A user can search item-placement data scanned from QL-printed product and shelf labels during putaway to generate a QL-printed pick list with bar codes matching the products to be picked.

#### 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.

#### Customer Pick-up

Wirelessly send customer orders from your store floor to a QL printer in the warehouse—and print a pick ticket for the item to be brought to the dock for pick-up.

## QL 420

### SHIPPING AND RECEIVING APPLICATIONS

#### Shipment Labeling

Enhance delivery and tracking of parcels. Print 2-D bar code shipping labels with QL printers for real-time tracking from one transfer hub to the next.

#### Receiving Verification/Inventory Updates

Apply bar codes as deliveries are received to record product arrival and provide standardized labeling for use with your business system. Record the putaway location by scanning the product and QL-printed shelf labels. Scan again upon removal for inventory accuracy.

## QL 420

### ROUTE ACCOUNTING APPLICATIONS

#### Meter Reading Receipts

With each delivery, drivers can enter data from the utility meter into a handheld terminal and print a customer receipt using a QL mobile printer. Data in the terminal can be uploaded upon return without any additional data entry, reducing the chance for error.

#### Delivery Verification Slips/Invoices

Use a QL printer to print delivery receipts/invoices at the point of transaction, confirming the actual quantities that transferred possession. When ordered items are not included in the delivery, update the invoice through a handheld terminal.

#### Gas and Utility Inspection

Print labels for application on gas pumps and utility meters on site to verify quality inspections are accurate and up to date.

### 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](http://www.zebra.com).



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



Specifications at a Glance\*

**QL 320™**

**MAXIMUM PRINT AREA**

Width: 2.9"/73.66 mm  
Length (with standard memory): 16"/406.34 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™**

**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**

4"/101.6 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

**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

**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 IP54 standards

**Electrical**

7.2 V Lithium Ion battery (2100 Ahr QL 320; 4200 Ahr 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**

Part 15 FCC Class B and CE compliance; built to UL, CUL, and TUV standards

**Printer Control Languages**

CPCL-Native  
ZPL II®-X.8 emulation  
EPL2-Emulation

**MEDIA CHARACTERISTICS**

**Labels/Receipts**

Max. Roll Size: 2.625"/66.68 mm O.D. on a .75"/19.05 mm core  
Tag Receipt Thickness: 2.5 mm to 6.0 mm  
Label Thickness: 2.5 mm to 6.5 mm  
Media Type: Roll-fed, die-cut, linerless, receipt, fanfold (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 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: PDF-417; Maxi Code

**OPTIONS AND ACCESSORIES**

LCD control panel  
802.11b wireless local area network (WLAN) or Bluetooth™  
Up to 2 MB SRAM; 2 MB Flash  
Peel and present mode  
Patent pending media width auto-sensing feature  
Linerless printing  
Spare Lithium Ion battery packs  
Battery chargers  
International character sets  
Label Vista software for receipt and label design and font creation  
Fanfold media tray (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.

