



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 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 IrDA, Bluetooth®, 802.11g, 802.11b, or dual radios (Bluetooth and WLAN) offer the flexibility to adjust to a wide range of connectivity needs.

The Wireless QuickLink Connection

Choose the QuickLink connectivity module that suits your needs:

- 802.11g or 802.11b—the latest and greatest WLAN connectivity
- Bluetooth—low-power consumption short-range connectivity
- Dual radio support—for using Bluetooth and WLAN in the same printer
- Cable-ready—connect to a wider variety of terminals than any other mobile printer
- Support for advanced wireless security standards such as 802.11i, VPN and WPA/WPA2



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, 802.11g or 802.11b connectivity.



Extend the arm of your stationary printers by adding wireless mobile printers.



Applications for the QL Series

LAW ENFORCEMENT

Electronic Citations

Use electronic citation systems and QL printers to replace handwritten tickets—and eliminate the cost, delay, and errors of manual data entry.

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.

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.

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.

QL Series Accessories



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.

Users can also order a kickstand, 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 standard 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. For smaller mounting surfaces the flexible RAM mount style Handi-Mount can be ordered. 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.

Mobile Media



Zebra provides both in-stock and custom-made solutions for all applications, including more than 1,000 combinations of high-quality and reliable labels, tags, and receipts. All products are designed and tested on Zebra products to ensure optimum print quality.

Lithium-Ion Batteries



Lithium-ion (Li-Ion) cells represent the latest in mobile battery technology. They offer higher power-to-volume and power-to-weight than their nickel metal hydride and nickel cadmium counterparts.

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

2 MB SRAM; 2 MB Flash

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

2 MB SRAM; 2 MB Flash

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

2 MB SRAM; 2 MB Flash

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

QL Plus™ Series



Managing your Mobile Assets made easy with Zebra

Lower your total cost of ownership and gain complete peace of mind with ZebraComplete™, the Mobile Supplies and Service Program. This cost-saving program fulfills all your mobile printer supplies, replacement printhead, and repair service needs for however long you choose. Best of all, you'll get this comprehensive coverage for just pennies more per roll of ordered supplies! For details, call Zebra's Supplies team at +1 866 230 9495.

QL 220 Plus™, QL 320 Plus™, and QL 420 Plus™

For complex mobile printing applications requiring advanced wireless connectivity support, complex graphics or fonts, or ZPL® and EPL™ commands, Zebra has designed a product line enhancement to the QL series, the QL Plus series. By ordering the "Plus" version of a QL 220, QL 320, or QL 420, you'll get added features and benefits designed around users with mobile printing applications. With the QL Plus series of mobile printers, users will enjoy the features and benefits indicated below:

ADDED FEATURES

- High-speed 32-bit processor
- Expanded Memory: 4 MB Flash/8 MB DRAM
- USB 2.0 full-speed connectivity
- Standard firmware application includes ZPL II®-x.8, EPL2™ and support for wireless security protocols such as VPN and WPA/WPA2
- Support for 802.11g radios and 802.11i security

BENEFITS

- Faster processing
- Support for complex graphics, fonts, and applications, and future wireless protocols
- Faster cabled file transfers via USB
- Easy migration for future security and wireless needs
- Simple integration with other Zebra lines of printers by using ZPL, XML or EPL commands
- Support for emerging advanced security standards
- QL 320 Plus offers threaded inserts for mounting

QL Series



Specifications at a Glance*



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

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.

*Specifications subject to change without notice.
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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
Open Access 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

7.4 V Lithium ion battery (2.1 Ah QL 220, QL 320; 4.2 Ah QL 420)
External charger options

Communication Interface Capabilities

Wireless security features (i.e. VPN or WPA/WPA2)
8 pin din (RS232C)
Selectable baud rate: 9600 to 115.2 Kbps
Xon/Xoff or Hardware flow control
Bluetooth option
Wireless LAN (802.11b or 802.11g)
Dual radio option (QL 420 Plus only)
USB (QL Plus models only)
IrDA
Wavelink Avalanche® Support
Motorola MSP Support

Agency Approvals

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

ZEBRALINK™ SOLUTIONS

Software

ZebraDesigner™ Pro
ZebraNet™ Bridge Enterprise
Label Vista

Firmware

CPCL-Native
ZPL II-x.8 (QL Plus models only)
EPL2 (QL Plus models only)
XML (QL Plus models only)

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/SYMBOLS

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
Contains UFST® from Monotype Imaging, Inc.

OPTIONS AND ACCESSORIES

LCD control panel
802.11g/802.11b wireless local area network (WLAN) or Bluetooth
Media width auto-sensing feature
Linerless printing
Spare lithium ion battery packs
Battery chargers (AC/DC)
International character sets
Fanfold media bin (QL 420 and QL 420 Plus only)
Mobile mount (QL 420 and QL 420 Plus only)
Battery Eliminator
Soft case
Kickstand
XML Support Applications and Documentation utility CD



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