



## QL Plus™ Series

Mobile printing for businesses on the go

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

The QL Plus Series of direct thermal mobile printers has been designed with the most advanced technology in rubberised over-moulding to maintain both rugged construction and minimal weight.

With centre-loading media, smart battery monitoring and an optional LCD, they provide user-friendly options to keep your business moving.

### High Performance Architecture

With a 32 bit processor coupled with 8MB DRAM and 4MB FLASH memory, the QL Plus series provides best in class performance and functionality. Print 2D barcodes and implement the latest wireless security standards with no impact to performance or print speed.



Reliability on demand™

Featuring:

- \* Center Loading Media
- \* Easy to Install
- \* 802.11b L

# QL Plus™ Series



## Meet the QL Plus Series!

Connected today, connected tomorrow, constructed to last!

For complex mobile printing applications requiring the most feature-rich offering of any mobile printer in the market:

### Rugged, lightweight printer

- Rubber infused plastic over-mould design for tough conditions
- Damage-resistant to multiple drops of up to 1.5m
- Weight of less than 1kg for effortless mobility

### Load and go!

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

### QuickLink™ connectivity

Choose the QuickLink connectivity module that suits your needs:

- 802.11b – the latest and greatest WLAN connectivity (Symbol® CompactFlash™ or Cisco® PCMCIA)
- Bluetooth™ – add mobile printing to your workgroup 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 with either a serial RS232 connection, or USB 2.0 for full speed connectivity.

## 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 Plus 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 labelling

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

## FIELD FORCE 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 Plus mobile printer. Data in the terminal can be uploaded upon return without any additional data entry, reducing the chance of error.

### Delivery verification slips/invoices

Use a QL Plus 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.

### Fuel and utility inspection

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

## MANUFACTURING APPLICATIONS

### Pallet labelling

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

### Product identification

Provide the customised labels required by different vendors. The QL Plus printers' high-resolution, thermal print-head guarantees consistently scannable bar codes and crisp graphics and text.

## DISTRIBUTION APPLICATIONS

### Forklift-mounted printing

With the QL 420 Plus™ 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 shop floor to a QL Plus printer in the warehouse – and print a pick ticket for the item to be brought to the collection point for pick-up.

## SHIPPING AND RECEIVING APPLICATIONS

### Shipment labelling

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

### Receiving verification/stock updates

Apply bar codes as deliveries are received to record product arrival and provide standardised labelling for use with your business system.





## QL 220 Plus™

For 50mm (2") label, ticket, and receipt printing, the QL 220 Plus is a light and compact mobile printer offering the same wireless and network-addressable capability as its bigger brothers. Ruggedly built yet light to carry, it is ideal for retail, postal and healthcare applications.

### Maximum Print Area

Width: 48mm (1.89")  
Length: 508mm (20")  
(with standard memory)

### Resolution

8 dots per mm (203dpi)

### Maximum Print Speed

76.2mm (3") per second

### Memory

8MB DRAM; 4MB Flash (standard)

### Physical Characteristics

Width: 90.7mm (3.57")  
Depth: 75.2mm (2.96")  
Height: 181.6mm (7.15")  
Weight (with battery): 0.59kg (1.3lb)

### Media Specifications

Label and liner width:  
19.05mm (0.75") to 53.9mm (2.12")



## QL 320 Plus™

Zebra's popular QL 320 Plus mobile printer, for widths up to 75mm (3"), is widely used in retail, distribution and hospitality applications for labels, receipts and ticket printing. Count on its rugged design to withstand accidental drops and endure tough shipping or receiving environments.

### Maximum Print Area

Width: 73.7mm (2.9")  
Length: 406.4mm (16")  
(with standard memory)

### Resolution

8 dots per mm (203dpi)

### Maximum Print Speed

101.6mm (4") per second

### Memory

8MB DRAM; 4MB Flash (standard)

### Physical Characteristics

Width: 117mm (4.6")  
Depth: 78.7mm (3.1")  
Height: 203.2mm (8.0")  
Weight (with battery): 0.75kg (1.65lb)

### Media Specifications

Label and liner width:  
31.8mm (1.25") to 79.2mm (3.1")



## QL 420 Plus™

Bring the flexibility of wireless printing to your 102mm (4") label or receipt applications with Zebra's QL 420 Plus mobile printer. Ruggedly built to survive the rigours of warehousing, distribution and field-force applications, the QL 420 Plus offers a mobile mount option to allow printing in a forklift or vehicle.

### Maximum Print Area

Width: 103.9mm (4.09")  
Length: 508mm (20")  
(with standard memory)

### Resolution

8 dots per mm (203dpi)

### Maximum Print Speed

76.2mm (3") per second

### Memory

8MB DRAM; 4MB Flash (standard)

### Physical Characteristics

Width: 152.4mm (6.0")  
Depth: 76.2mm (3.0")  
Height: 190.5mm (7.5")  
Weight (with battery): 0.91kg (2lb)

### Media Specifications

Label and liner width:  
50.8mm (2.0") to 104.1mm (4.1")

## Standard Features

- Print method: direct thermal
- Rubber infused plastic over-mould design for tough conditions
- Battery monitoring via a battery low indicator light or gauge on the optional LCD
- Lithium Ion battery
- "Clam-shell" design and centre-locking media loading
- Backward-compatible with Encore™ and Cameo™ media and cables
- Label Vista™ and Windows® printer drivers
- High speed 32 bit processor
- 8MB DRAM, 4MB Flash memory

## Operating Characteristics

### Environment

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

### Electrical

- 7.2V Lithium Ion battery (QL 220 Plus and QL 320 Plus: 2100 a.h.; QL 420 Plus: 4200 a.h.)
- External charger options

## Media Characteristics

### Labels/Receipts

#### Max. Roll Size

- 66.7mm (2.6") O.D. on a 19mm (0.75") O.D. core

#### Tag Receipt Thickness

- 0.064mm (0.0025") to 0.152mm (0.006")

### Communication Interface Capabilities

- 8-pin DIN (RS232C)
- USB 2.0 full speed support 12 Mbits/second
- Selectable baud rate: 9600 to 115.2Kbits/second
- XON/XOFF or hardware flow control
- Bluetooth™ option
- 802.11b wireless LAN option
- 802.11g wireless LAN option

### Agency Approvals

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

### Printer Control Languages

- Native CPCL with ZPL and EPL emulations (standard)

## Fonts/Graphics/Symbologies

### Fonts and Character Sets

- Standard fonts: 25 bitmapped, 1 smooth-scalable (CG Triumvirate™ Bold Condensed)\*\*
- Optional Fonts: downloadable bitmapped and scalable fonts
- International character sets (optional): Chinese 16x16 (trad), 16x16 (simplified), 24x24 (simplified); Japanese 16x16, 24x24, Hebrew/Arabic

### Graphic Features

- Graphics, line and box drawing features; PCX bitmap supported
- Supports user-defined fonts and graphics - including custom logos

### Bar Code Symbologies

- Linear base codes: Code 39, Code 93, UCC/EAN 128, Code 128, UPC-A, UPC-E, EAN-8, EAN-13, EAN 14, UPC and EAN 2 or 5 digital extensions, Plessey, FIM Postnet, Interleaved 2 of 5, MSI, Codabar
- 2-Dimensional: PDF-417, Datamatrix, Maxi Code, RSS, Composite Symbology, QR

## Options and Accessories

- LCD control panel
- 802.11b wireless local area network (WLAN) or Bluetooth
- 802.11g wireless local area network (WLAN) or Bluetooth
- Peel and present mode
- Patent pending media width auto-sensing feature
- Liner-free 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)
- Environmental case
- Stand to rest printer on when not being carried
- Handi Mount
- Cigarette-lighter charger (for in-vehicle charging)
- 802.11b security standards including VPN, WPA, 802.1x and more

\*Specifications listed are for base model printers with standard features only unless otherwise noted. Specifications subject to change without notice.

\*\*Contains UFST® from Agfa Monotype Corporation.

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## Vehicle mount for the QL Plus 420

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

For further information on these products, please visit the Zebra web site at: [www.zebra.com](http://www.zebra.com)



### Zebra Technologies

*European Headquarters*  
Zebra House, The Valley Centre  
Gordon Road, High Wycombe  
Buckinghamshire HP13 6EQ  
United Kingdom  
Tel: +44 (0)1494 472872  
Fax: +44 (0)1494 450103

*Regional Sales Office*  
Mollsfeld 1  
D-40670 Meerbusch  
Germany  
Tel: +49 (0) 2159 6768 0  
Fax: +49 (0) 2159 6768 22

*Regional Sales Office*  
50 rue Marcel Dassault  
F-92100 Boulogne-Billancourt  
France  
Tel: +33 (0)1 55 20 93 93  
Fax: +33 (0)1 55 20 93 99

*International Headquarters*  
333 Corporate Woods Parkway  
Vernon Hills, IL 60061-3109  
USA  
Tel: +1 847 793 2600  
Fax: +1 847 913 8766

### Other Locations

*United States:* California, Florida, Rhode Island, Wisconsin  
*Europe:* Italy, the Netherlands, Poland, Spain, Sweden  
*Asia-Pacific:* Australia, China, Japan, Singapore, South Korea  
*Middle East:* Dubai



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