

PRODUCT SPEC SHEET
ZQ600 SERIES MOBILE PRINTERS



ZEBRA
CAPTURE
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ZQ600 Series Mobile Printers

Premium Mobile Label And Receipt Printers For Maximum Productivity, Ease Of Use And Manageability

Want to improve inventory management and customer service in your store? With the ZQ600 Series mobile printer, you can. The ZQ600 Series takes Zebra's popular QLn platform and makes it even better — adding advanced technology and innovative design that drive productivity, ease-of-use and manageability to a new level. A large color display takes all the guesswork out of printer status. Advanced battery technology and more battery capacity, power every minute of the longest shift. The instant wake-up feature ensures the ZQ600 Series never sleeps on the job. Your workers get the fastest, most dependable wireless connections inside the four walls and your IT department will find the ZQ600 Series easier to integrate, manage, setup and secure thanks to Zebra's Link-OS® operating system and powerful Print DNA suite of applications, utilities and developer tools. The ZQ600 Series — the next evolution in the gold standard for mobile label and receipt printing.



Premium Features for Maximum Productivity

The latest wireless connections for fast, reliable, and secure printing

Zebra printers are known for leading the market in wireless technology and the ZQ600 Series offers the fastest, most dependable wireless connections inside the four walls. With support for 802.11ac Wi-Fi and its latest security protocols, plus Bluetooth 4.1 Classic and Low Energy, your workers can count on blazing fast and secure connections.

Industry-standard 802.11r fast roaming for seamless access

Workers rarely stand still. With support for 802.11r fast roaming technology, your workers can depend on a connection while they are on the move.

The industry's only instant wake-up over Wi-Fi

Forget about frustrating printer reboot times that drain productivity. You can be sure that the ZQ600 Series is ready whenever workers press 'print'. This intelligent printer enters sleep mode when it is idle, and automatically wakes up the moment the user sends a print job — delivering instant availability and maximum power efficiency. And unlike other mobile printers, the ZQ600 Series' instant wake-up works over both Wi-Fi and Bluetooth.

Large color display makes configuration and operation a snap

It's easy to set up and maintain the ZQ600 Series with its large display, user-friendly interface and easily customized menu. The display changes color when the printer is paused or in an error state, such as out of media or latch open, so users instantly know what the printer needs to stay up and running. And since the ZQ600 Series is based on Zebra's Link-OS menu system, you'll get a common UI and user experience across other Zebra Link-OS mobile, desktop and industrial printers to lower the learning curve.

Business tough — built for all-day every day enterprise use

While the ZQ600 Series is lightweight and comfortable to wear all shift long, it is loaded with features that give it long-lasting durability, including over-molding, a tempered-glass display and seamless one-piece design. The high-grade resin is one of the toughest plastics available for greater impact resistance. And multiple mechanical design improvements further increase printer robustness and uptime.

Superior Battery Power and Power Management

The highest capacity battery in its class

Your workers depend on their mobile printers nearly every minute of the day. With the ZQ600 Series' high capacity 3250 mAh (ZQ610 / ZQ620) and 6800 mAh (ZQ630) battery, you can be sure that every worker has plenty of power for every shift.

Do more on a single charge with Zebra's Power Smart Print Technology™

This patented Zebra technology maximizes efficiency by delivering the exact amount of power required for the highest quality printing. Printers with PSPT save an estimated 20 to 30 percent of their battery power, so users can do more on a single charge.

Extraordinary battery management capabilities with PowerPrecision+ technology

The ZQ600 Series' PowerPrecision+ battery delivers the ultimate in battery power and management. A wealth of easily accessible battery metrics makes it easy to identify aging batteries before they impact productivity. You can be sure that every worker starts every shift with a healthy and fully-charged battery. And better visibility into battery health means you can reduce the size of the spare battery pool.



PRODUCT SPEC SHEET

ZQ600 SERIES MOBILE PRINTERS

Advanced Platform Grows with Your Business

Zebra Print DNA – transforming printers from the inside

The printer hardware is just the start of what you need to maximize the value of your printers. The ZQ600 Series is powered by Link-OS, Zebra's robust printer operating system, and Print DNA, a combination of productivity, management, development and visibility tools. The result is a superior printing experience through better performance, simplified remote manageability and easier integration.

Robust memory to support applications today and tomorrow

The ZQ600 Series offers 256 MB RAM and 512 MB Flash — providing more than enough memory for all your fonts and graphics needs today, as well as all the firmware upgrades and new Print DNA tools for years to come.

Backward compatible with QLn accessories

With more than one million units sold, Zebra's QLn Series set the bar for retail mobile printing. Now, the ZQ600 Series raises the bar again. And since the ZQ600 Series is backward compatible with QLn accessories, you can upgrade to the latest platform and ingenuity without buying new accessories or rebuilding the settlement room.

Maximum Uptime with Comprehensive Remote Management Options

Resolve problems faster with the Ethernet Cradle

Remote management is easy with the ZQ600 Series' Ethernet Cradle. By docking the printer in the cradle at the end of every shift, IT can remotely upgrade the firmware as needed to ensure that each printer is operating at peak performance. Should employees experience a problem, they can simply dock the printer into the cradle for a remote diagnosis — eliminating the downtime and costs associated with shipping a printer to the repair depot when nothing is physically wrong.

Easily manage all your printers —all from a single location

With our comprehensive and flexible remote management tools, you can maintain, secure and troubleshoot printers simply and easily, from anywhere, at anytime. Use the free Printer Setup Utilities to simplify setup and out-of-the-box configuration tasks. And with the optional Printer Profile Manager Enterprise, you can manage one printer, a group of specific printers or all printers anywhere in the world. This browser-

based solution lets you instantly discover every Link-OS printer on your network —there's no need to manually track down, configure or troubleshoot printers.

Seamless integration with your device management system

Get the simplicity of a single-pane-of-glass to manage all your Zebra mobile devices and printers —including the ZQ600 Series. With Print DNA's MDM Connectors, you can easily integrate networked ZQ600 Series printers into your existing AirWatch or SOTI MobiControl device management system. And if you are using Ivanti Avalanche (powered by Wavelink), the ZQ600 Series offers support for Avalanche right out of the box.

Ensure continued reliability with Printhead Diagnostics

With the ZQ600 Series, you don't need to worry about downtime from a worn-out printhead. Our unique Printhead Diagnostics provide visibility into the health of printheads across your deployment, enabling you to take action before productivity is impacted.

Protect sensitive customer and business data with PrintSecure

This complimentary Print DNA utility makes it easy to configure over 30 settings to fine-tune printer security to protect your data and your infrastructure by creating secure printer connections and blocking unauthorized printer access.

Consistently exceptional Zebra Certified Supplies

Printing supplies can impact everything from printhead lifespan to operational efficiency. That's why we design, produce and rigorously pre-test our own line of thermal printing supplies to ensure consistent, optimized performance in your Zebra printer —and peace of mind for you. For industry-leading quality, service and thermal printing expertise, choose Zebra Certified Supplies.

Maximize uptime, business operations and printer visibility with services

You invest in Zebra printers to better serve your customers and boost operational efficiency. Now, you can ensure predictable performance and eliminate unbudgeted repair expenses with Zebra OneCare. You get unmatched technical support direct from Zebra, as well as comprehensive repair services, including accidental damage and defined repair turn-around times. And Zebra's Visibility Services provide the real-time insight into printer operational information you need to increase printer availability and optimize utilization within your workflows.

PRODUCT SPEC SHEET
ZQ600 SERIES MOBILE PRINTERS

ZQ600 Accessories

The ZQ600 Series offers all the accessories you need, from power and charging to carrying and protection options, cables and more. Please refer to the Mobile Printer Accessory Guide, found on Zebra.com, for all the accessories available for the ZQ600 Series.

Lithium-Ion Charging Accessories

Ethernet Cradle



Single-bay
Ethernet Cradle



4-bay
Ethernet Cradle
*Only available on ZQ610 & ZQ620

Connect ZQ600 Series printers to your wired Ethernet network via the ZQ600 Series Ethernet cradle to enable easy remote management by your IT or operations staff —helping to ensure each printer is operating optimally and ready for use. The Ethernet cradle can communicate over 10 Mbps or 100 Mbps networks using auto-sense.

The single-bay ZQ600 Series Ethernet cradle also charges the battery while it is in the printer, while the 4-bay version (with optional wall mount kit) charges four printers at a time. The 4-bay version includes an internal Ethernet switch and second Ethernet port, so you can link and manage four 4-bay Ethernet cradles (a total of 16 printers) from one port.

The printer remains fully functional so you can print while it is in either cradle. The cradle's LED lights indicate DC power and Ethernet-link status.

Remote printer management over your Ethernet allows:

- Battery management for monitoring battery health. Knowing each battery's lifespan stage simplifies central management of your spare-battery pool.
- Firmware management for updating printer firmware, eliminating the need for IT staff to travel to the local user site, or for the printer to be sent back to a central location for updating.
- Print management for updating templates, fonts and graphics in order to print new label formats.
- Device management for updating startup (e.g., config. sys), WML (front panel) or HTML (browser) files to enhance or change configuration and status collection.
- Network management for updating encryption keys or certificate files to maintain the highest level of security.
- Problem resolution and troubleshooting local printer issues that may otherwise require the printer to be sent in for repair.
- Ability to manage Bluetooth printers, which traditionally have been off-network.

What comes with the cradle?

Unit with AC Adapter: Cradle, AC adapter, power cord and document CD including cradle user manual and installation guide.

Cradle Unit: Cradle and document CD including cradle user manual and installation guide (AC adapter can be purchased separately).

AC Adapter



Connect the AC adapter to your ZQ600 Series printer and wall outlet to charge the printer's PowerPrecision+ battery while in the printer. The printer can print labels and perform other functions during charging. Shown with printer for reference purposes; printer is not included.

Cradle



Dock and charge a single ZQ600 Series printer in a vehicle or on a forklift. Includes 15-60V DC power supply. Can be optionally used with a RAM Arm mount.*

Continued on following page

PRODUCT SPEC SHEET
ZQ600 SERIES MOBILE PRINTERS

ZQ600 Accessories (continued)

Lithium-Ion Charging Accessories (continued)

1-Slot Battery Charger



Docks and charges a single PowerPrecision+ Li-Ion printer battery. Integrated power supply. Ships with line cord for your region.

3-Slot Battery Charger



Dock and charge up to three PowerPrecision+ Li-Ion printer batteries at a time. The 3-slot battery charger ships with a power supply and line cord for your region.

Dual 3-Slot Battery Charger with Y Cable Connection



Dock and charge up to six PowerPrecision+ Li-Ion printer batteries at a time. The dual 3-slot battery charger ships with a power supply, Y-Cable and country specific power cord. Requires the appropriate line cord for your region.

Extended Capacity PowerPrecision+ Battery



*Only available on ZQ610 & ZQ620

The Extended Capacity PowerPrecision+ battery option provides enhanced battery capacity over the standard PowerPrecision+ battery, providing more power for increased uptime. No need to upgrade your ZQ600 Series printer to accommodate the extended battery — just purchase as a standalone accessory to use with your current ZQ600 Series printer or, order it as a configurable printer option so your printer ships ready to go with this powerful accessory. The choice is yours.

Carrying Straps / Cases



Hand Strap: Allows the printer to be carried by hand.

Shoulder Strap: Allows the printer to be carried over the shoulder.

Soft Case: Add an extra layer of protection for harsh environments with a soft case. While in the case, the printer is IP54-rated for resistance to windblown water and dust. Case provides openings for changing the media and batteries and all connectors are accessible. Includes shoulder strap.

Hard Case: Add an extra layer of protection from abrasion in harsh environments with a hard case. Includes metal belt clip.*

PRODUCT SPEC SHEET
ZQ600 SERIES MOBILE PRINTERS

ZQ600 Series Specifications

STANDARD FEATURES

- Apple® iOS, Android and Windows Mobile connectivity
- Direct thermal printing of barcodes, text and graphics
- CPCL, EPL™ and ZPL® programming languages
- 512 MB Flash supports downloadable programs, receipt formats, fonts and graphics (128 MB available for user storage)
- ZQ620 & ZQ610: 3250 mAh (nominal) 23.4 Wh removable, rechargeable PowerPrecision+ Li-Ion battery
ZQ630: 6800 mAh (nominal) 49.4 Wh removable, rechargeable PowerPrecision+ Li-Ion battery
- Built-in battery charger
- Belt clip for unobtrusive and convenient printing (not compatible with extended capacity battery)
- Black mark and gap media sensing using fixed center position sensors
- Easy-to-use peel and present mode
- Label present sensor for issuing labels one at a time
- Tear bar for easy media dispensing
- Center-loading media locking for variable roll widths
- "Clamshell" design for easy media loading
- Management: Mirror, SNMP, Web server, Profile Manager, AirWatch®, SOTI® MobiControl™ and Ivanti Avalanche® (powered by Wavelink)
- Large, easy-to-read color display (288 x 240 pixels)
- Color display can be customized using WML (text and icons)
- 5-way navigation buttons, two software defined keys
- Printer color alerts on the display
- Tolerance of multiple drops from 5 ft./1.52 m (ZQ620 & ZQ610) and 6 ft./1.83 m (ZQ630) to concrete
- IP43 dust- and water-resistance rating (IP54 with soft case)
- 400 MHz 32-bit ARM processor
- XML support
- Supports vertical and horizontal printing
- Printers can be used in any orientation
- QR barcode links to web-based help pages
- Zebra Print Touch simplifies Bluetooth pairing and launches web-based help pages with Near Field Communication (NFC) enabled devices
- Label odometer
- NTP (Network Time Protocol) support via Wi-Fi or Ethernet
- Supports Zebra Network Connect manufacturing plant floor solution when used with the Ethernet cradle
- RFID is available on the ZQ630 as a separate product (please see the ZQ630 RFID Spec Sheet for more information)

PHYSICAL CHARACTERISTICS

Dimensions	ZQ610: 6.5 in. L x 3.5 in. W x 2.75 in. H 165 mm L x 89 mm W x 70 mm H
	ZQ620: 6.8 in. L x 4.6 in. W x 3.3 in. H 173 mm L x 117 mm W x 84 mm H
	ZQ630: 7.35 in. L x 6.5 in. W x 3.25 in. H 187 mm L x 165 mm W x 82.5 mm H

Weight with battery	ZQ610: 1.33 lbs/0.6 kg
	ZQ620: 1.6 lbs/0.73 kg
	ZQ630: 2.45 lbs/1.1 kg

Note: The Extended Capacity Li-Ion smart battery option adds 0.20 lbs/0.09 kg to the weight and 0.6 in./16 mm to the height of either ZQ600 Series printer.

PRINTER SPECIFICATIONS

Operating System	Link-OS®
Resolution	203 dpi/8 dots per mm
Memory	256 MB RAM; 512 MB Flash (standard)

PRINTER SPECIFICATIONS (CONTINUED)

Maximum Print Width	ZQ610: 1.9 in./48 mm
	ZQ620: 2.8 in./72 mm
	ZQ630: 4.1 in./104 mm
Maximum Print Speed	Up to 4.5 in./115 mm per second
Media Sensors	Black mark and gap media sensing using fixed center position sensors; label present sensor for issuing batch labels one at a time
Print Length	Minimum: 0.5 in./12.7 mm Maximum: 32 in./813 mm
Power	ZQ610 & ZQ620: 3250 mAh (nominal) 23.4 Wh removable, rechargeable PowerPrecision+ Li-Ion battery ZQ630: 6800 mAh (nominal) 49.4 Wh removable PowerPrecision+ Li-Ion battery

MEDIA CHARACTERISTICS

Maximum Label and Liner Length	0.5 in./12.7 mm to 32 in./813 mm or continuous
Media Width	ZQ610: 1.0 in./25 mm to 2.18 in./55.4 mm
	ZQ620: 1.0 in./25 mm to 3.125 in./79 mm
	ZQ630: 2.0 in./51 mm to 4.4 in./112 mm (linered) 2.0 in./51 mm to 4.1 in./104 mm (linerless)
Maximum Media Roll Size	ZQ610: 2.2 in./55.9 mm OD on a 0.75 in./19 mm or 1.375 in./34.9 mm inner core
	ZQ620: 2.6 in./66 mm OD on a 0.75 in./19 mm or 1.375 in./34.9 mm inner core
	ZQ630: 2.6 in./66 mm O.D. on a 0.75 in./19 mm or 1.375 in./34.9 mm inner core
Thickness	2.3 mil to 5.5 mil tag stock or 6.5 mil label stock
Media Types	Die-cut labels and tags, linerless labels, receipt paper, RFID (ZQ630 RFID compatible), black bar and gap sensing

OPERATING CHARACTERISTICS

Environment	Operating Temp.: -4°F to 122°F/-20°C to 50°C
	Operating Humidity: 10% to 90% non-condensing
	Storage/Transportation Temp.: -13°F to 149°F/-25°C to 65°C ¹ Storage Humidity: 10% to 90% non-condensing
Agency Approvals	Emissions: FCC Part 15, Subpart B, EN55022 Class-B, EN60950, EN55024 and VCCI class B
	Susceptibility: EN55024, EN61000-4-2, EN61000-4-3, EN61000-4-4, and EN61000-4-5
	Safety: CE, TUV, CSA

FIRMWARE

CPCL, EPL and ZPL programming languages
ZBI 2.x™ — powerful programming language that lets printers run standalone applications, connect to peripherals, and much more

BARCODE SYMBOLOGIES

Barcode Ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1
Linear Barcodes: Code 39, Code 93, UCC/EAN128, Code 128, Codabar (NW-7), Interleaved 2-of-5, UPC-A, UPC-E, 2 and 5 digit add-on, EAN-8, EAN-13, 2 and 5 digit add-on
2D Barcodes: PDF417, MicroPDF417, MaxiCode, QR Code, GS1/DataBar™ (RSS) family, Aztec, MSI/ Plessey, FIM Postnet, Data Matrix, TLC39

The ZQ600 Series is ideal in:

Retail

- Shelf Edge Labels
- Mark Down Labels
- Replacement Tags
- Mobile Point of Sale Receipts
- Return Labels

Manufacturing / Warehouse

- Pick and Pack Labels / Lists
- Raw Materials
- Finished Goods
- RFID Case / Pallet Labels*

Transportation & Logistics

- Receiving
- Put Away
- Reverse Logistics Inventory Management
- Cycle Count
- Cross-Docking
- Picking
- Staging
- Packing
- Shipping

PRODUCT SPEC SHEET

ZQ600 SERIES MOBILE PRINTERS

ZQ600 Series Specifications (continued)

FONTS AND GRAPHICS

Standard Fonts: 25 bitmapped, 1 smooth, scalable (CG Triumvirate Bold Condensed*)
Optional Fonts: downloadable bitmapped/scalable fonts
International Character Sets (optional): Chinese (traditional/simplified); Japanese; Korean; Thai; Vietnamese
*Contains UFST® from Agfa Monotype Corporation

COMMUNICATION AND INTERFACE CAPABILITIES

ZebraNet® 802.11ac radio with support for:

- WEP, TKIP and AES encryption
- WPA and WPA2
- 802.1x (with WEP, WPA or WPA2)
- EAP-FAST, EAP-TLS, EAP-TLS, PEAP, LEAP
- 802.11d and 802.11i
- Simultaneous Bluetooth 4.1 dual radio
- Wi-Fi Certification
- Fast roaming using Pairwise Master Key (PMK) caching, Opportunistic Key Caching (OKC), EAP Fast Session resumption or 802.11r
- Support for Ad Hoc mode

Bluetooth 4.1 (Classic and BLE) radio

- Security modes 1 – 4
- "Made for iPod/iPhone/iPad" certified
- Key Bonding

10/100 Ethernet support (via charging cradle)

Cabled Communications Specifications

- USB 2.0 full-speed interface (12 Mbps)
- Mini-B connector with optional strain relief
- Serial interface: 14-pin RS-232C port for communication to terminal or other host up to 115.2 Kbps

OPTIONS AND ACCESSORIES

Following is a list of key accessories. Please refer to the Mobile Printer Accessory Guide for a detailed list of all the accessories available for the ZQ600 Series:

Charging Options — inside the printer

- AC adapter
- Single cradle: single bay Ethernet and charging cradle (not compatible with extended capacity battery)
- Quad cradle: quad bay Ethernet and charging cradle, with internal switch and stacking port (Only available on the ZQ610 and ZQ620, not compatible with the extended capacity battery)

Charging Options — outside the printer

- 1-bay, 3-bay and 6-bay battery chargers

Vehicle charger with cigarette lighter adapter

Spare batteries

ZQ610 and ZQ620: 4900 mAh (nominal) removable extended capacity Li-Ion battery (4-cell bump out pack)

ZQ630: 6800 mAh (nominal) 49.4 Wh removable, rechargeable PowerPrecision + Li-Ion battery

1 - Tested per MIL-STD-810G

Features are subject to availability. Specifications are subject to change without notice.

* Only available on the ZQ630.

OPTIONS AND ACCESSORIES (CONTINUED)

Carrying Options

- Shoulder strap; Hand strap; Soft case (provides an IP54 rating) hard case (ZQ630 only) — not compatible with extended capacity battery

Linerless printing (with silicone platen roller only)

ZBI 2.x

Printer stand for tabletop mounting

Serial and USB cables with strain relief

Forklift mount accessories*

- Heavy-duty mount with fanfold tray
- Plate for RAM-arm mounting
- Cradle for easy attach/detach
- DC converters for powering and charging from forklift batteries
- Forklift battery eliminator*

PRINT DNA SOFTWARE SOLUTIONS

Development Tools With faster, easier and smarter integration of Zebra printers with your devices and applications, your Zebra printing solutions are up and running in less time, with less cost.

Management Tools Minimize IT effort and maximize IT control with Print DNA management tools — the easy way to add and manage any number of printers, anywhere — from a handful of printers to thousands of printers all around the world.

Productivity Tools Reach new levels of productivity with innovations that streamline tasks and workflows, optimize device performance and solve tomorrow's printing problems today.

Visibility Tools Regardless of whether or not you have an existing Mobile Device Management solution in place, robust visibility tools provide unparalleled insight into printer health, usage and performance.

PRODUCT WARRANTY

The ZQ600 Series printers are warranted against defects in workmanship and materials for a period of 1 (one) year from the date of shipment. For the complete warranty statement, please visit: www.zebra.com/warranty

RECOMMENDED SERVICES

Zebra OneCare Essential and Select Services maximize the availability and productivity of your devices. Key features include 24/7 technical support, comprehensive coverage, advance replacement and software updates. Optional Visibility Services are available. For more information go to www.zebra.com/zebraonecare. (Note: Service availability may vary by region.)



PRINT DNA SOFTWARE

This printer is supported by our powerful Print DNA suite of applications, utilities and developer tools that give our printers better performance, simplified remote manageability, and easier integration.



Print DNA features may vary by model and a Support Contract may be required. For more information, please visit: www.zebra.com/printdna