



# Zebra® RW™ Series



SEE MORE. DO MORE.



## Wireless Printers Add Versatility to Printing Tasks on the Open Road

Designed for the Road Warrior, the Zebra RW series of mobile printers is ideal for printing delivery receipts and invoices on the go. The modular design allows users to choose among wireless options, card readers, and integral accessories such as vehicle mounts for simplified route printing. Easy-access vehicle mounting cradles and charging options as well as user-intuitive interfaces and angled displays enhance the convenience and simplicity of mobile printing.

## Rough and Ready Durability for Reliable Printing

Uniquely designed for harsh outdoor environments, RW series mobile printers endure extreme temperatures and weather conditions. Bounce it in the truck, carry it in the rain, drop it to the pavement, and expect the same performance day in and day out.

## Ideal for These Applications

**Direct Store Delivery & Route Accounting** / Invoices, Delivery Receipts, Sales Orders, Inventory Management, DEX\*

**Field Service** / Service Estimates

**Public Safety & Law Enforcement** / e-Citations

**Retail** / Mobile Point-of-Sale

**Transportation** / Ticketing and Passenger Information

\* U.S. only

# MEET THE RW SERIES

The RW series: rugged enough for the Road Warrior with the most feature-rich offering of any mobile printer in the market.

## Rugged and Easy-to-Use Printer

- IP54-certified for resistance to windblown water and dust
- Damage-resistant to multiple drops of up to 6 feet to concrete
- Weight of 1 1/2 to 2 pounds for effortless mobility
- Resistant to extreme hot and cold temperatures

## Ergonomically Designed to Fit Comfortably on the Hip

- Single push-button media access for simple re-loading
- Angled LCD for easy viewing of printer status comes standard

## Smart and Sophisticated Operation

- Print using the same commands as your Zebra tabletop or desktop printers with common language support.
- Choose the wireless connectivity module that suits your needs: 802.11b/g, Bluetooth 2.0, dual radio support—for using Bluetooth® and WLAN in the same printer (RW 420 only)
- Quickly and easily print complex labels, symbologies and graphics thanks to the RW series' fast processor and large memory.



**RW 220™**

The user-friendly 2-inch RW 220 simplifies printing tasks for the mobile workforce with intuitive interfaces, rugged construction, and reliable printing.

### Maximum Print Area

- Width: 2.20"/56 mm
- Length: Continuous

### Resolution

- 203 dpi/8 dots per mm

### Maximum Print Speed

- 3"/76.2 mm per second maximum

### Media Specifications

- Media Width: 1"/25 mm to 2.37"/60 mm



**RW 420™**

Neither wind, nor rain, nor harsh temperatures can keep the RW 420 from delivering high-quality 4-inch receipts and tickets.

### Maximum Print Area

- Width: 4.09"/104 mm
- Length: Continuous

### Resolution

- 203 dpi/8 dots per mm

### Maximum Print Speed

- 3"/76.2 mm per second maximum

### Media Specifications

- Media Width: 2"/52 mm to 4.12"/105 mm standard

## Physical Characteristics

### Base Version

- Width: 4.4"/112 mm
- Depth: 2.9"/74 mm
- Height: 6.8"/173 mm
- Weight: 1.45 lbs./658 g

### Card Reader Version

- Width: 4.4"/112 mm
- Depth: 3.2"/81.2 mm
- Height: 6.8"/173 mm
- Weight: 1.55 lbs./703 g

### Base Version

- Width: 6.3"/160 mm
- Depth: 3.0"/76 mm
- Height: 6.9"/175 mm
- Weight: 2.00 lbs./907 g

### Card Reader Version

- Width: 6.3"/160 mm
- Depth: 3.1"/79 mm
- Height: 6.9"/175 mm
- Weight: 2.15 lbs./975 g

# APPLICATIONS

---

## ROUTE ACCOUNTING



### Delivery Verification Slips

Use an RW series printer at the point of transaction to print a delivery receipt that confirms the actual quantities that transferred possession.

### Invoices

Take days off your billing cycle! Using mobile computers and printers to issue invoices at the time of delivery accelerates the payment process, eliminating the need for manual data entry and billing in the office.

## FIELD SERVICE



### Service Estimates

Offer customers documented information regarding the estimate that was quoted. This estimate is entered into the system in real time and can be easily accessed when the customer calls in using the contact information and estimate number that is indicated on the printout.

## RETAIL



### Mobile Point-of-Sale/Queue Busting

Watch sales and satisfaction improve when you offer mobile point-of-sale service for line- or queue-busting, featuring Zebra printers with integrated card readers and wireless network connectivity.

## TRANSPORTATION

### Ticketing/Passenger Information

Print tickets or passenger information aboard buses, trains, or boats for an efficient way of reducing lines and increasing customer satisfaction.

## PUBLIC SAFETY/LAW ENFORCEMENT



### e-Citations

Improve safety, enforceability, and efficiency with electronic citation systems that are easy to use and tough to beat.

# MOBILE A TO Z

## From Accessories to Supplies to ZebraCare™ Plans

### Vehicle Cradles



#### RW 420 Cradle

Intuitive, push-button release cradle for convenient storage and charging of the printer while in a vehicle. Fanfold media can be fed through the base of the cradle to extend the media capacity of the printer.

Designed to meet the SAE J1113-11 International Automotive Standards.



#### RW 220 Cradle

Grab your printer and go! Store your compact printer conveniently in the vehicle and release it instantly to take to the customer with a push of a lever. Flexible Ram Mounting kits are

also available for mounting the cradles in convenient orientations.

### Cases

Add dust and rain protection to your RW series mobile printer with an environmental case. By adding an extra layer of protection, your printer will be well prepared for the harshest conditions.

### Carriers



#### RW 420 Route Palette

RW 420 Route Palette provides a single, convenient carrier for Zebra's rugged RW 420 mobile printer and your choice of Motorola's MC909X-Short Version, MC9590/ MC9596/

MC9598, MC9060/ MC9094/ MC9097, MC75 or MC70 mobile computer. Designed to meet the SAE J1113-11 International Automotive Standards.



#### RW 420 Print Station

The RW 420 Print Station is a compact, lightweight and rugged mobile workforce tool designed with a built-in, easy-to-use RW 420 mobile printer and support

for your choice of Motorola® MC70, MC75, MC55 or MC65 removable mobile computer. Both the printer and mobile computer can charge simultaneously via a single source, saving time, space and money.

### RJ-45 Cable

For wired communications, Zebra recommends using a serial RJ-45 cable for connection with your RW printer's RS-232C serial port. A USB to RJ-45 cable is also available for USB cabled file transfers. The RW series USB port is intended for setup and maintenance of the printer only.

### RW 420 4-Bay Power Station



Ideal for users who prefer to "dock and go." At the end of your shift, simply slide up to four RW 420 printers into this power station for simultaneous charging.

### Lithium-Ion Chargers

#### Fast Charger

Charges a single Zebra Li-Ion battery at a time in approximately 2–5 hours.

#### Quad Charger

Charges up to four Zebra Li-Ion batteries at a time in approximately 2–5 hours.

#### DC/DC Vehicle Charger with Cigarette Lighter Adapter

Plug the printer into your vehicle's cigarette lighter adapter for convenient charging on the go.



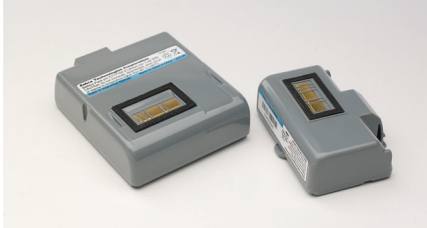
## RW 420 Battery Eliminator

---

If you keep and use your printer in the cab—fixed-mounted and powered by your vehicle's power system instead of the printer's battery—look to the RW 420 Battery Eliminator to reduce your cost of owning the RW 420 printer.

## 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. Order spare Li-Ion batteries for your RW series printer to guarantee you'll always be charged up and ready to go!

## ZebraCare™ Depot Service Agreements

---

A ZebraCare Depot service agreement is a cost-effective means of planning and budgeting your annual maintenance expenditures. This back-to-factory service ensures that trained and certified Zebra technicians will bring your printer back to factory specifications every time. Zebra offers four plans to meet your specific needs.



## Mobile Media

---

Ensure high-quality, crisp images and text, and that your receipts and documents remain readable and intact for their entire life, by choosing genuine Zebra™ supplies. Zebra offers materials that have been tested and approved by Zebra Supplies R&D to meet the durability, image quality, and archival requirements of your application and budget. We can also pre-print your company logo, instructions, terms and conditions and other information, allowing you to maximize the functionality of your receipts and documents.

## Considerations When Selecting the Best Material for Your Mobile Application

### Heat

Since direct thermal materials are heat sensitive, exposure to extreme heat will cause the chemicals in the material to react, turning the document black and unreadable. To avoid this problem, choose our heat-resistant 8000D High Temp 3.2 mil Receipt material, which withstands temperatures up to 194° F (90° C).

### Moisture

Most paper materials on the market have limited durability against moisture and degrade once subjected to it. Zebra's PolyPro™ 4000D 3.8 mil Receipt synthetic material offers a waterproof and tear-proof solution.

### Thickness

Thicker materials tend to be more durable and are perceived as higher quality. However, the thicker the material, the less paper per roll, resulting in fewer documents that can be printed before the roll needs to be changed.

### Archivability

To reach published archival duration specifications, documents need to be stored with compatible materials in a dark place with relative humidity between 45 and 65 percent, and temperatures below 77° F (25° C).

### Topcoating

One of the biggest differences between thermal papers is their coatings, which are unseen by the naked eye. All thermal papers have a basecoat and a thermal coat, but not all of them have a topcoat. A topcoat provides an extra layer of protection for the image.

# SPECIFICATIONS AT A GLANCE\*

## Printer Name

RW 220  
RW 420

## Print Characteristics

- Print method: Direct thermal
- Resolution: 203 dpi/8 dots per mm
- Maximum print speed: 3"/76.2 mm per second

## Memory

- 8 MB Flash, 16 MB RAM

## Standard Features

- Rugged design
- 4-button angled LCD (standard)
- Standard serial and USB interfaces
- Advanced 32-bit architecture for high-speed processing
- Enhanced battery management

## Operating Characteristics

### Environment

- Meets IP54 certification
- Operating Temp.: -4° F/-20° C to 131° F/55° C
- Storage/Environ.: -22° F/-30° C to 149° F/65° C
- Operating Humidity: 10-90% non-condensing
- Storage Humidity: 10-90% non-condensing

### Electrical

- Standard 4.0 Ah, 7.4V battery (RW 420)
- Standard 2.0 Ah, 7.4V battery (RW 220)
- External charging options (vehicle and AC)
- Shock-mounted internal components
- Selectable baud rate: 9600 to 115.2 Kbps
- Xon/Xoff or hardware flow control (RTS/CTS)
- USB 2.0 full speed support, 12 Mbits/second (for setup and configuration)
- RS-232C serial port (RJ-45 connector) for cabled use

### Regulatory

FCC Part 15 Class B, VCCI Class B, NOM/NYCE CE compliance (Class B), C-Tick, CSA

## ZebraLink™ Solutions

### Software

- ZebraDesigner™ Pro
- Zebra Mobile SDK
- ZebraNet™ Bridge Enterprise
- Zebra Universal Driver
- Label Vista
- Auto-detect firmware load
- Battery management (monitors battery for longer life and performance)

## Networking and Connectivity

- Bluetooth® v. 2.0
- 802.11b/g Zebra Performance Radio
- Native wireless security support: VPN, WPA/WPA2, WEP, Kerberos, WPA-PSK, EAP-TLS, EAP-TTLS, EAP-FAST, LEAP, PEAP, 802.11i
- RW 420 can be configured with dual radios (Bluetooth and WLAN)

## Firmware

- Wavelink Avalanche®
- Motorola® MSP
- Native CPCL with ZPL® and XML support (standard)

## Media Characteristics

- Max. Roll Size (O.D.): 2.25"/57 mm
- Max. Media Width (RW 420): 4.12"/105 mm
- Max. Media Width (RW 220): 2.37"/60 mm
- I.D. core: .75"/19 mm or 1.38"/34.9 mm
- Thickness: .002"/.05 mm to .0063"/.16 mm
- Media Types: direct thermal tags or receipt paper, synthetic media, UV coated media, limited label support

## Fonts/Graphics/Symbolologies

### 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 16 x 16 (trad), 16 x 16 (simplified), 24 x 24 (simplified); Japanese 16 x 16, 24 x 24, Hebrew/Arabic

### Graphic Features

Supports user-defined fonts and graphics—including custom logos

### Barcode Symbolologies

- Linear Barcodes: Code 39, Code 93, UCC/EAN-128, EAN-14, Code 128, UPC-A, UPC-E, EAN-8, EAN-13, EAN-14, UPC and EAN 2-of-5 digital extensions, Plessey, FIM Postnet, Interleaved 2-of-5, MSI, Codabar
- 2-Dimensional: Aztec, Data Matrix, GS1 DataBar™ (RSS) family (12 barcodes), MaxiCode, PDF417, QR Code

\*Contains UFST from Monotype Imaging, Inc.

## Options and Accessories

- Magnetic stripe reader and EMV-certified smart card reader
- Lithium Ion Fast AC Charger
- Lithium Ion Quad Charger
- Cigarette lighter charger (for in-vehicle charging)
- Vehicle cradle for docking and charging
- RW 420 4-Bay Power Station
- Ram Mount Kit
- Route Palette (RW 420 only)
- Shoulder Strap/Hand Strap
- Environmental Soft Case
- Fanfold media support (RW 420 only)
- Linerless label support (RW 420 only)
- XML Support Applications and Documentation utility CD

## Supplies

For optimal printing quality and proper printer performance across our product line, Zebra strongly recommends the use of genuine Zebra™ supplies as part of the total solution.



**Corporate Headquarters**  
+1 800 423 0442  
inquiry4@zebra.com

**Asia-Pacific Headquarters**  
+65 6858 0722  
apacchannelmarketing@zebra.com

**EMEA Headquarters**  
+44 (0)1628 556000  
mseurope@zebra.com

**Latin America Headquarters**  
+1 847 955 2283  
inquiry4@zebra.com

**Other Locations / USA:** California, Georgia, Illinois, Rhode Island, Texas, Wisconsin  
**Europe:** France, Germany, Italy, the Netherlands, Poland, Spain, Sweden, Turkey, United Kingdom  
**Asia Pacific:** Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand, Vietnam  
**Latin America:** Argentina, Brazil, Colombia, Florida (LA Headquarters in USA), Mexico  
**Africa/Middle East:** Dubai, South Africa

\*Specifications subject to change without notice.

©2012 ZIH Corp. ZebraLink, ZebraDesigner, ZebraNet, ZebraCare and all product names and numbers are Zebra trademarks, and Zebra, the Zebra head graphic, and ZPL are registered trademarks of ZIH Corp. Motorola is a trademark or registered trademark of Motorola Trademark Holdings, LLC and is used under license. Bluetooth is a registered trademark of Bluetooth SIG, Inc. Wavelink Avalanche is a registered trademark of Wavelink Corporation. GS1 Databar is a trademark of GS1 US, Inc. CG Triumvirate and UFST are trademarks of Monotype Imaging, Inc. and may be registered in certain jurisdictions. All other trademarks are property of their respective owners.

P1026290 Rev. 5 (12/12)