

Zebra® P4T™/RP4T™ printer



World's First Mobile RFID Printer—and Ideal for Long-Lasting Thermal Transfer Labels

Zebra's P4T/RP4T is the first-ever mobile thermal transfer printer with RFID printing/encoding capability. The easy-to-carry P4T/RP4T printer enables you to print long-life bar code labels and documents up to 4" wide where and when you need them—resulting in enhanced data and asset-tracking accuracy and improved workforce efficiency. Uniquely flexible, the P4T/RP4T offers the advantages of thermal transfer image durability (bar codes/text/graphics), optional RFID, advanced wireless connectivity options and included direct thermal mode in a versatile variety of combinations.

Thermal Transfer Longevity

When paired with tested genuine Zebra™ thermal transfer supplies, the P4T/RP4T printer produces 2- to 4-inch-wide labels or other documents that withstand harsh environments and offer archival longevity ranging from 18 months to up to 10 years in outdoor applications.

UHF RFID Capability

With its order-now-or-later RFID option, the P4T/RP4T printer is perfect if you need point-of-application UHF EPC Gen 2 smart labeling for compliance or business-improvement applications today—or if you think you might need it in the future.

Advanced Technology for Ease of Use and Productivity

- Advanced wireless: Bluetooth® 2.0, secure 802.11b/g, or both; serial/USB
- Smart operation—Battery monitoring and auto-adjusting ribbon cartridge*
- Rugged for outdoor use—IP14 water-resistance rating; IP54 dust- and water-resistance with soft case; tolerant to multiple drops up to 5' to concrete
- Fast, easy media and ribbon loading
- Comfortable to wear and hold

* 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. Specifically, each of the P4T™/RP4T™ is designed to work only with genuine Zebra™ smart batteries and smart ribbon cartridges designed for the P4T™/RP4T™, thus maximizing safety, ease of use and print quality.



Mobile A to Z

From Accessories, to Supplies, to ZebraCare™ Service Agreements

AC Adapter



Connect the AC adapter to your P4T/RP4T and wall outlet to charge your P4T/RP4T at the end of a shift.

AC single charger

Charges a single battery outside the printer.

Quad Battery Charger

Charges up to 4 Zebra Li-Ion batteries at a time.

Mobile Mounts and Handi-Mounts

For vehicles or forklifts, allows flexible mounting to many surfaces.

DC Adapter

Connect the DC adapter to your P4T/RP4T and forklift battery to charge your P4T/RP4T while using your forklift.

Vehicle Cradle



Conveniently and securely store and charge the printer in a vehicle or forklift. Release it instantly with a push of a lever to take to the customer or a remote location.

Heavy-Duty Forklift Mount



Heavy duty shock and vibration protection.

In-Vehicle Mobile Charger

A convenient and cost-effective means to charge your P4T/RP4T while on the road.

Spare P4T/RP4T Battery

Spare batteries ensure you'll always be charged and ready to go.

Cables

A family of cables is available for tethered connectivity between your P4T/RP4T and a variety of the most popular handheld computers.

Nylon Soft Case



Adds an extra layer of protection from harsh environments. Provides IP54-level protection against dust and moisture.

Mobile Media

Zebra provides both in-stock and custom-made receipt paper, labels, and tags specifically engineered to ensure optimum performance in Zebra printers. Custom options include watermarks, preprinted logos, and terms and conditions. Zebra also offers quality heat, water, and UV-resistant coatings for attractive, reliable printouts. For details, contact your authorized reseller, or call Zebra at +1 877 275 9327.

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.

ZebraCare™ Depot



Now These Markets and Applications Can Benefit from Mobile Printing

The easy-to-wear and carry Zebra P4T and RFID-enabled RP4T mobile printers are ideal for indoor and outdoor applications in government, manufacturing, transportation and logistics, mobile field service and healthcare.



Manufacturing/Transportation & Logistics Thermal Transfer Applications

You likely already use a thermal transfer tabletop printer in your operations because your printed labels need to stay readable and scannable long-term. You apply these long-lasting labels to items that must move through a long supply chain, endure long storage times, and/or encounter harsh or outdoor environments. Now you can extend the functionality of your thermal transfer stationary printer to print labels precisely where they need to be applied. When you print labels on the spot and on demand with the rugged P4T/RP4T mobile printer, you improve worker productivity by saving steps to and from a centralized printer. And you improve accuracy by ensuring the right label is applied to the right item.

Typical Uses

The P4T/RP4T mobile printer finds a ready home in manufacturing plants and warehouses; retail store warehouses, outdoor garden centers, and distribution centers; and third party logistics warehouses.

Manufacturing and warehousing

- Receiving—inventory labeling
- Shipping—apply labels to items as they're picked, even from a forklift
- Work-in-process labeling—for harsh production environments and to provide lifetime product tracking for recall management and security authentication
- Asset management

Transportation and logistics

- Producing shipping labels where mobility is valued, such as labeling large items or items at the shipping dock
- Cross-docking
- Container labeling

Manufacturing/Transportation & Logistics/Retail RFID Applications

Whether you've implemented an RFID initiative to meet compliance mandates or to gain asset visibility and process efficiencies—or both—conveniently extend RFID labeling to places you couldn't before. A mobile UHF Gen 2 RFID mobile printer for printing/encoding 4-inch smart labels adds the step-saving efficiency of point-of-application labeling, as well as the assurance that the label is applied accurately to the right pallet.

Typical Uses

RFID compliance

If you're a supplier to large retailers or the U.S. Department of Defense (DoD), you may face an RFID compliance mandate, or may face one in the future. The P4T/RP4T is especially valuable to:

- Print new RFID pallet or carton labels when existing pallets are broken down and repackaged, or to replace damaged RFID pallet labels.
- When specific pallets in inventory are bound for a mandating customer, pick and apply RFID labels right there in the warehouse; the P4T/RP4T forklift mount makes it easy. Also ideal for labeling large items, or labeling at the shipping dock.

Business improvement

As use of RFID tagging grows, your company will find a mobile RFID printer valuable for:

- Closed-loop applications such as work-in-process tagging and other on-site asset and inventory tracking applications.
- Streamlining logistics and supply chain management. Shipping/receiving, warehouse and distribution operations can tag specific cases and pallets, as well as large assets, on the spot—helping you improve enterprise materials management, inventory control and track-and-trace systems.
- Retail item-level RFID tagging. Some companies are experimenting with tagging at the item level so they have full supply chain visibility. A small, versatile mobile RFID printer will be a must in retail environments for re-pricing and restocking of product.





Mobile Workforce Field Service Applications

Workers who spend most of their time working out of the building benefit from mobile technology. Carrying handheld computers and printers with them enables them to print on site, on demand—enhancing their efficiency, data accuracy and customer satisfaction. Your mobile workers work in the field, where you need them to be able to apply labels that deliver durability and longevity in harsh outdoor environments, or deliver archive-quality documents up to 4" wide that don't fade over time. Now with the rugged P4T/RP4T, you can print long-lasting thermal transfer labels and documents out in the field—and avoid the extra time, labor and potential errors caused by preprinting them.

Typical Uses

- Label attachment at remote locations (repair history)
- Utility labeling outside of plant
- Receipts—using the recommended genuine Zebra media—where image durability and archiveability are required
- Asset tagging
 - Utility: light poles and fixtures, electrical power/ water/gas/phone/cable sub-station equipment and components
 - HVAC: boiler, chiller, other equipment asset tags; proof of service receipts
 - Construction sites: heavy equipment and tool asset tagging; inventory control
 - Indoor equipment tags: long-life tags
 - Fleet management: identifying and tracking service vans, trucks and other vehicles
 - Building inspection: fire extinguishers, exits, sprinkler systems

Government

When it comes to U.S. military asset tracking and Unique Identification (UID) bar coding, you need labels that can withstand extreme conditions. In state and local law enforcement, you need citations and evidence labels that remain sharp and readable despite harsh environments and the effects of time. Now, mobile thermal transfer printing brings you this durability plus the benefits of point-of-application efficiency and accuracy.

Typical Uses

U.S. Department of Defense

Scanning bar code labels between destinations tracks movement and streamlines the deployment of troops and equipment, ensuring tight inventory control. The United States Department of Defense uses rugged Zebra thermal transfer printers and long-lasting synthetic labels that withstand harsh military environments to identify and track equipment and supplies.

Now, with the rugged, thermal transfer P4T/RP4T mobile printer, you can print, at the point of application, durable labels that withstand heat, sandstorms, and other harsh outdoor conditions.

- For example, label large assets like vehicles, and label inventory as it is received off cargo planes in war zones, and print missing and replacement MIL-STD-129 labels whenever needed.
- It's also a convenient way to spot re-label legacy assets valued over \$5,000 with UID replacement labels.
- Specific genuine Zebra supplies have been independently tested to ensure compliance with the DoD's requirements for UID labeling under MIL-STD-129 and MIL-PRF-61002A.

State and local law enforcement

- Zebra's mobile printing and ticketing solutions for electronic citation systems allow officers to easily print citations on the scene. The P4T/RP4T printer's thermal transfer printing together with special genuine Zebra receipt media provide you with extra confidence that even when exposed to moisture or high temperatures, citations will remain readable and enforceable.
- For a secure chain of custody, you need crime evidence bar code labels with archival longevity that ensures they can be scanned long after collection. You also need the mobility of a printer that can print evidence labels right at the point of collection to ensure accurate information. The P4T/RP4T mobile thermal transfer printer answers both needs at once.



The Complete Solution

Application	Genuine Zebra Supplies**		Genuine Zebra Accessories
Manufacturing and Warehousing			
Shipping and receiving	Z-Select™ 4000T; also RFID		<ul style="list-style-type: none"> • Vehicle cradle for docking and charging • AC adapter • Quad battery charger • RAM® mounting hardware for vehicles or forklifts • Heavy-duty forklift mount • DC adapter • Nylon soft case • Spare battery • Cables
Work in process	Z-Select 4000T Tag		
Asset management	Z-Select 4000T; also RFID PolyPro™ 4000T	For indoor applications For outdoor applications	
Transportation and Logistics			
Shipping	Z-Select 4000T; also RFID		<ul style="list-style-type: none"> • Vehicle cradle for docking and charging • AC adapter • Quad battery charger • RAM® mounting hardware for vehicles or forklifts • Heavy-duty forklift mount • DC adapter • Nylon soft case • Spare battery • Cables
Cross-docking	Z-Select 4000T; also RFID		
Container labeling	Z-Select 4000T; also RFID		
Mobile Workforce Field Service			
Repair history	Z-Select 4000T; also RFID PolyPro 4000T	For indoor applications For outdoor applications	<ul style="list-style-type: none"> • Vehicle cradle for docking and charging • AC adapter • Quad battery charger • RAM mounting hardware for vehicles or forklifts • DC adapter • In-vehicle mobile charger • Nylon soft case • Spare battery • Cables
Outdoor utility	PolyPro 4000T		
Other documents up to 4" wide	Z-Select 4000T Receipt	Where image durability and archiveability are required	
Asset tagging	Z-Ultimate 4000T 8000T Ultra-Tuff Tag PolyPro 4000T 8000T Ultra-Tuff Tag Z-Select 4000T Tag; also RFID PolyPro 4000T	Utility HVAC rooftop equipment tags HVAC service history Construction sites Indoor equipment tags Fleet management	
Government			
UID solutions	PolyPro 4000T with 5095 ribbon 8000T Z-Endure™ with 5100 ribbon	2 years outdoor 10 years outdoor	<ul style="list-style-type: none"> • Vehicle cradle for docking and charging • AC adapter • Quad battery charger • RAM mounting hardware for vehicles or forklifts • In-vehicle mobile charger • Nylon soft case • Spare battery • Cables
Evidence labeling	Z-Select 4000T; also RFID PolyPro 4000T	For indoor applications For outdoor applications	
E-citations	Z-Select 4000T Receipt 8000T Ultra-Tuff Tag	For limited exposure to rain For use in the rain	

**There are media beyond those listed that are suitable for your application. Please discuss with your Zebra representative.

ZebraCare Depot service agreements

A cost-effective way to plan and budget for your annual maintenance expenditures and protect your investment.



Specifications at a Glance*

Standard Features

- 8 MB Flash /16 MB SRAM memory
- USB 2.0 serial connection
- 32 bit processor
- Thermal transfer or direct thermal printing modes
- Large LCD
- Drop-in/pop-out media and ribbon loading (see inset)
- Tolerant of multiple drops up to 5' to concrete
- Sensor detects gap, black bar, media, media width, door ajar and ribbon
- Smart battery and ribbon cartridge
- Shoulder strap
- Peeler

Printer Specifications

Resolution

203 dpi/8 dots per mm

Memory

8 MB Flash/16 MB SRAM

Max print width

4.09"/104 mm

Print speed

DT: 3"/76.2 mm per second

TT: 1.5"/38.1 mm per second

Media Characteristics

Maximum label and liner width

4.12"/104.6 mm

Maximum media roll size

Non-RFID media: 2.6"/66 mm O.D. on a .75"/19.1 mm I.D. core

RFID media: 2.6"/66 mm O.D. on a 1.375"/34.9 mm I.D. core

Media thickness

3.2 mil to 8.5 mil

Media types

Labels and documents up to 4" wide on either synthetic or paper

Ribbon Characteristics

Ribbon type

Wax; wax/resin

Standard length

98.4/30 m

Ratio

Approximately 2:1 media to roll to ribbon depending on media thickness

Ribbon width

4.33"/110.0 mm

Operating Characteristics

Environmental**

- DT Operating Temp.: -4° F/-20° C to 122° F/50° C
- TT Operating Temp.: 32° F/0° C to 113° F/45° C
- Storage Temp.: -22° F/-30° C to 149° F/65° C
- Operating Humidity: 10% to 90% non-condensing

Electrical

7.4V, 4200 mAh rechargeable Li-Ion battery

Agency approvals

EMC: FCC Part 15 and EN55022 Class B limits

Radio approval for BT, 802.11b/g & RFID: FCC, Industry Canada

Safety: IEC 60950, NRTL marking for US & Canada

EU: EMC, LVD, R&TTE Directives

Additional countries being certified. Please check zebra.com for availability.

Physical Characteristics

- Width: 6.53"/165.9 mm
- Height: 8.68"/220.5 mm
- Depth: 3.38"/85.9 mm
- Weight: 2.9 lbs/1.32 kg with ribbon and battery

ZebraLink™ Solutions

Software/Networking/Firmware

Printer Control Language—The P4T/RP4T mobile printer comes equipped with CPCL, ZPL[®]†, EPL™ and XML, ensuring easy integration into existing systems that run Zebra mobile printers without the need for additional software. WML for display programming. †ZPL required for RFID support.

Fonts/Graphics/Symbologies

Fonts and character sets

- Scalable text feature
- Standard resident fonts† can be rotated in 90° increments
- International character set support: US/Canadian English/Latin 1 & 5 (Incl. Turkish), Japanese 16x16, Japanese 24x24, Chinese 16x16 (traditional), Chinese 16x16 (simplified), Chinese 24x24 (simplified), Korean Mincho, Korean Myeong. Others available upon request.

Graphic features

Supports user defined fonts and graphics and logos

Bar code symbologies

- Linear Bar Codes: 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
- 2-Dimensional: PDF417, MaxiCode, QR Code, GS1 DataBar™ (RSS) family, Aztec, MSI/Plessey, FIM Post Net, Data Matrix
- Bar Code Ratios: 1.5:1, 2:1, 2.5:1, 3:1, 3.5:1

† Contains UFST from Monotype Imaging, Inc.

Communication and Interface Capabilities

- Communication interface: USB 2.0
- Wireless: Bluetooth, short range radio frequency connectivity. Profiles supported: SPP
- WLAN (802.11b/g) support for the following security protocols: Airbeam Safe VPN, EAP-TLS, EAP-TTLS, LEAP, PEAP, EAP-FAST. WPA with the protocols listed and WPA2-PSK (AES or TKIP).

Options and Accessories

- Bluetooth 2.0
- 802.11b/g
- RFID Option
 - Supports passive EPC Class 1 Gen 2 protocol
 - Fully integrated ThingMagic® UHF RFID Reader/Encoder
 - RFID ZPL commands allow ease of RFID setup with maximum flexibility
 - Variable RFID read and write power settings to support a wide variety of inlays
 - RFID counters keep track of good and bad labels
 - Verification and voiding of inlays to prevent usage of bad labels
 - Interoperable with a wide variety of Gen 2 labels and tags
 - Supports extended memory features of newer Gen 2 inlays
- Fanfold support
- AC adapter
- AC single charger
- Quad battery charger
- Vehicle cradle for docking and charging
- RAM® mounting hardware for vehicles or forklifts
- Heavy-duty forklift mount
- DC adapter
- In-vehicle mobile charger
- Nylon soft case
- Spare battery
- Cables



The P4T/RP4T opens easily for a quick and simple change of media and ribbon cartridge.

*Specifications subject to change without notice. ** Extremes in temperature and label image density may affect throughput and print image quality. Please contact Zebra for guidance to maximize the performance of your solution. ©2010 ZIH Corp. All product names and numbers are Zebra trademarks, and Zebra, the Zebra head graphic and ZPL are registered trademarks of ZIH Corp. All rights reserved. Bluetooth is a registered trademark of Bluetooth SIG, Inc. RAM is a registered trademark of National Products, Inc. ThingMagic is a registered trademark of ThingMagic, LLC. UFST is a trademark of Monotype Imaging, Inc. and may be registered in certain jurisdictions. GS1 DataBar is a trademark of GS1 US, Inc. All other trademarks are the property of their respective owners.



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