



# Zebra® R4Mplus™

RFID Printer/Encoder  
for EPC Class 1 Tags

## RFID. Bar Coding. We've Got You Covered.

The R4Mplus builds on Zebra's rich heritage as a leader in on-demand bar code compliance labeling solutions and as the pioneer of the first radio frequency identification (RFID) smart label printer/encoder on the market. One of Zebra's "R" series of on-demand printer/encoders, the R4Mplus helps you to comply with the RFID supply chain requirements of major retailers and government agencies as it also enhances efficiencies within your own company. Plus, the R4Mplus is designed to support Electronic Product Code™ (EPC) RFID standards as they develop—making it an ideal solution as you move forward with your RFID initiatives.

## Flexible and Reliable

Able to support ultra-high-frequency (UHF) Class 1 transponders from Alien Technology, the R4Mplus offers unique flexibility by providing both "read and write" and "read only" options. UHF transponders are perfect for tagging pallets, cartons, and cases throughout the supply chain because their long read ranges allow for unattended batch reading. Count on the R4Mplus with die-cast metal construction for dependable performance in your distribution center or warehouse environment.

With support for EPC UHF Class 1 tags, the R4Mplus printer/encoders are perfect for pilots, field tests, and demonstration projects for:

- Inventory management
- Asset tracking
- Distribution
- Shipping/Receiving
- Supply chain management



[www.rfid.zebra.com](http://www.rfid.zebra.com)



# R4Mplus



Confidently advance your EPC RFID compliance and business improvement initiatives with the UHF R4Mplus for Class 1 tags.

## STANDARD FEATURES

Integrated UHF RFID reader/encoder for EPC Class 1 (Alien) tags  
Print methods: Thermal transfer or direct thermal  
Construction: Die-cast aluminum base, frame and printhead mechanism  
Zebra Printer Management  
Metal media cover with large clear window  
Zebra E<sup>3</sup> Printhead Energy Control  
Auto-calibration  
Adjustable transmissive sensor  
Real-time clock  
Auto-ranging (110 V–220 V) power supply  
Color-coded operator cues  
Back-lit LCD control panel

## PRINTER SPECIFICATIONS

### Resolution

203 dpi/8 dots per mm

### Memory

Standard: 4 MB Flash, 2 MB user available, 8 MB DRAM

### Optional:

Up to 32 MB additional linear Flash via PCMCIA

Up to 256 MB additional ATA format via PCMCIA or CompactFlash<sup>®</sup> cards

### Print Width

Width: 4.09"/104 mm

### Print Length

Length: 165"/4,202 mm

### Print Speed

10"/254 mm per second

### Media Sensors

Transmissive

## Specifications at a Glance\*

### MEDIA CHARACTERISTICS

#### Smart Labels

**Maximum label and liner length**  
39" / 991 mm

**Maximum label and liner width**  
4.50" / 114 mm Tear/Cutter; 4.25" / 108 mm Peel/Rewind

**Maximum roll diameter**  
8" / 203 mm O.D. on a 3" / 76 mm I.D. core

**Core diameter**  
3" / 76 mm

**Media thickness**  
.0023" / .058 mm to .01" / .25 mm

**Media types**  
Continuous or fanfold, die-cut, notched, tag stock, perforated  
For optimum print quality and performance, use Genuine Zebra Supplies.

**Supported Transponder Types**  
EPC UHF Class 1 (draft specification)  
Alien Technology (64-bit memory)

### RIBBON CHARACTERISTICS

**Outside diameter**  
3.2" / 81.3 mm

**Standard length**  
1476' / 450 m

**Ratio**  
3:1

**Width**  
2.0" / 51 mm to 4.33" / 110 mm

**Ribbon setup**  
Ribbon wound ink side out

**Core I.D.**  
1" / 25.4 mm

### OPERATING CHARACTERISTICS

#### Environmental

Operating temperature  
32° F/0° C to 104° F/40° C (Direct Thermal);  
40° F/5° C to 104° F/40° C (Thermal Transfer)  
Storage temperature -40° F/-40° C to 140° F/60° C  
Operating humidity 20-85% non-condensing  
Storage humidity 5-85% non-condensing

#### Electrical

Universal auto-ranging (PFC-compliant) power supply 90-265 VAC; 48-62 Hz; 5A fused

**Agency approvals**  
cULus, FCC-B

### PHYSICAL CHARACTERISTICS

Width: 10.93" / 278 mm  
Height: 13.32" / 338 mm  
Depth: 18.69" / 475 mm  
Weight: 32.4 lb/15 kg  
Shipping weight: 49 lb/22 kg

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### RELATED PRODUCTS

#### Options

Standard Memory: 4 MB Flash, 2 MB user available 8 MB DRAM

#### Optional Memory:

-Up to 32 MB additional linear Flash via PCMCIA  
-Up to 256 MB additional ATA format via PCMCIA or CompactFlash cards

Memory socket board option  
European and Asian font sets

#### Connectivity

RS-422/485 serial port adapter  
ZebraNet<sup>®</sup> PrintServer II (internal or external)

#### Software

BAR-ONE<sup>®</sup> 6.04 software

### COMMUNICATION AND INTERFACE CAPABILITIES

RS-232 serial port

High-speed, IEEE1284, bi-directional parallel interface  
ZebraNet PrintServer II (internal or external)

### PROGRAMMING LANGUAGES

#### Zebra Printer Management

ZebraLink<sup>™</sup>  
ZebraNet<sup>™</sup> Utilities  
ZebraNet Bridge

#### Programming Language

ZPL II<sup>®</sup>—Universal language for Zebra printers. Simplifies label formatting and enables format compatibility with other Zebra printers.  
ZBI<sup>™</sup>—Controls and interprets text and data from peripherals and non-ZPL printer programming languages. Transmits captured data over LAN, WAN, or wireless network via e-mail or TCP/IP messaging.

### BAR CODES/SYMBOLOLOGIES

#### Linear Bar Codes

Code 11, Code 39, Code 93, Code 128 with subsets A/B/C and UCC Case C Codes, UPC-A, UPC-E, EAN-8, EAN-13, UPC and EAN 2 or 5 digit extensions, Plessey, Postnet, Standard 2-of-5, Industrial 2-of-5, Interleaved 2-of-5, Logmars, MSI, Codabar, Planet Code, RSS

#### 2-Dimensional

Codablock, PDF417, Code 49, Data Matrix, MaxiCode, QR Code, Micro PDF417, TLC 39, RSS

### FONTS AND GRAPHICS

#### Fonts

7 bitmapped, 1 smooth scalable (CG Triumvirate<sup>™</sup> Bold Condensed)  
Sets: International character sets supporting the following code pages: IBM<sup>®</sup> Code Page 850  
International character set  
Contains UFST<sup>®</sup> from Agfa Monotype Corporation  
Optional European and Asian font sets

#### Graphic Features

Supports user-defined fonts and graphics—including custom logos  
ZPL II drawing commands—including boxes and lines



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