



# 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. 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



# R4Mplus



## Specifications at a Glance\*



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

Metal media cover with large clear window  
Multi-level Element Energy Equalizer™ (E<sup>3</sup>) for superior print quality

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

#### Print Width

Width: 4.09"/104 mm

#### Print Length

Length: 165"/4,202 mm

#### Print Speed

10"/254 mm per second

#### Media Sensors

Transmissive

### 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

### RELATED PRODUCTS

#### Options

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

### ZEBRALINK™ SOLUTIONS

#### Software

ZebraDesigner™ Pro  
Zebra Universal Driver

#### Networking

ZebraNet™ Bridge Enterprise  
ZebraNet® PrintServer II (internal or external)

#### Firmware

ZPL II®—Universal language for Zebra printers.  
Simplifies label formatting and enables format compatibility with other Zebra printers.

### COMMUNICATION AND INTERFACE CAPABILITIES

RS-232 serial port  
High-speed, IEEE1284, bi-directional parallel interface  
RS-422/485 serial port adapter

### BAR CODES/SYMBOLOGIES

#### 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™ Bold Condensed)  
Sets: International character sets supporting the following code pages: IBM® Code Page 850 International character set  
Contains UFST® 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

Not all products are available worldwide due to country-specific government regulations. Contact your Zebra representative for product availability.

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**HEADQUARTERS** Zebra Technologies International, LLC **T:** +1 847 793 2600 or +1 800 423 0442 **F:** +1 847 913 8766  
**ADDRESS:** 333 Corporate Woods Parkway, Vernon Hills, IL 60061-3109 U.S.A. **WEB:** www.zebra.com

**OTHER LOCATIONS** **USA:** California, Florida, Rhode Island, Wisconsin **EUROPE:** Denmark, France, Germany, Italy, Netherlands, Spain, Sweden, United Kingdom **ASIA-PACIFIC:** Australia, China, Japan, Singapore, South Korea  
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