Unprecedented Flexibility in RFID Printer/Encoders

Built on the solid, tested XiIII™ platform, Zebra’s R110Xi and R170Xi printer/encoders offer an unprecedented level of on-demand printing flexibility in tag placement and label size (4-inch and 6-inch), as well as unique features such as XML for seamless integration into enterprise systems, easier programming, more detailed front panel information, faster throughput, and statistics tracking, which allows customers to track the number of good and unusable labels.

Our most robust printer platforms to withstand rugged conditions and deliver high volume printing, Zebra’s R110Xi and R170Xi offer a rich set of features—including auto-calibration, multiple power settings and flexible inlay placement—that are demanded for leading RFID applications today. These printer/encoders embed ThingMagics’ Mercury4e, which supports both multiple antennas and multiple protocols, including UHF EPC-compliant Gen 2 Class 1; Gen 1 Class 1 and Class 0; Matrics’ 0+ read/write, ISO 18000-06B and Philips UCode 1.19. Utilizing software defined radio technology, the R110Xi and R170Xi models can be easily firmware upgraded to support emerging protocols with no compromise in performance.

The high-performance R110Xi (for 4-inch smart labels) and the R170Xi (for 6-inch smart labels) have been designed for case- and pallet-level identification for companies needing to streamline logistics and supply chain management and other applications including:

• Asset Tracking
• Inventory Management
• Work in Process
• Shipping/Receiving
• Distribution

Zebra ® R110Xi™ and R170Xi™ Multi-Protocol Printer/Encoders for EPC UHF Tags
The R110Xi for 4-inch-wide smart labels is designed for high performance and mission-critical ruggedness in the most demanding environments.

**MAXIMUM PRINT WIDTH**
- 203 dpi: 4.0” (103 mm)
- 300 dpi: 4.0” (103 mm)

**RESOLUTION**
- 203 dpi/8 dots per mm
- 300 dpi/12 dots per mm

**PRINT SPEED**
- 203 dpi: 2.4” (61 mm), 3” (76 mm) through 10” (254 mm) per second in 1” (25 mm) increments
- 300 dpi: 2.4” (61 mm), 3” (76 mm) through 8” (203 mm) per second in 1” (25 mm) increments

**PHYSICAL CHARACTERISTICS**
- Width: 10.37” (263.5 mm)
- Height: 15.5” (393.7 mm)
- Depth: 19.5” (495.3 mm)
- Weight: 50 lbs. (22.7 kg)

**MEDIA CHARACTERISTICS**
- Label and liner width: 203 dpi and 300 dpi: .79” (20 mm) to 4.5” (114 mm)
- Ribbon width: 203 dpi and 300 dpi: .79” (20 mm) to 4.33” (110 mm)

The R170Xi for 6-inch-wide smart labels delivers the legendary round-the-clock reliability and heavy-gauge-steel durability of Zebra’s high-performance Xi™ series.

**MAXIMUM PRINT WIDTH**
- 203 dpi: 6.6” (168 mm)
- 300 dpi: 6.6” (168 mm)

**RESOLUTION**
- 203 dpi/8 dots per mm
- 300 dpi/12 dots per mm

**PRINT SPEED**
- 203 dpi: 2.4” (61 mm), 3” (76 mm) through 12” (305 mm) per second in 1” (25 mm) increments
- 300 dpi: 2.4” (61 mm), 3” (76 mm) through 8” (203 mm) per second in 1” (25 mm) increments

**PHYSICAL CHARACTERISTICS**
- Width: 13.15” (334.4 mm)
- Height: 15.5” (393.7 mm)
- Depth: 19.5” (495.3 mm)
- Weight: 67 lbs. (30.5 kg)

**MEDIA CHARACTERISTICS**
- Label and liner width: 2.0” (51 mm) to 7.1” (180 mm)
- Ribbon width: 2.0” (51 mm) to 6.7” (170 mm)
# R110Xi / R170Xi

**Specifications at a Glance***

## PRINTER SPECIFICATIONS

<table>
<thead>
<tr>
<th>Memory</th>
<th>Standard 16 MB SDRAM (12 MB available for user); 4 MB Flash (2.0 available to user) Optional: PCMCIA or CompactFlash® (up to 256 MB memory each)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print length</td>
<td>Maximum non-continuous: 39” (991 mm) with standard memory</td>
</tr>
<tr>
<td>Media Sensors</td>
<td>Dual media sensors: transmissive and reflective</td>
</tr>
</tbody>
</table>

## MEDIA CHARACTERISTICS – SMART LABELS

| Maximum label and liner length | 39”/991 mm with standard memory |
| Maximum roll outside diameter | 8.0” (203 mm) |
| Core diameter | 3” (76 mm) core |
| Media thickness | .003” (.076 mm) to .0012” (.305 mm) |
| Media types | Continuous, die-cut, black mark For optimum print quality and performance, use Genuine Zebra Supplies |

## RIBBON CHARACTERISTICS

| Outside diameter | 3.2” (81.3 mm) |
| Standard length | 1476’ (450 m) or 984’ (300 m); provides 3:1 & 2:1 media roll to ribbon ratios |
| Ratio | Ribbon is recommended to be at least as wide as media. |
| Ribbon setup | Ribbon wound coated side out |
| Core I.D. | 1.0” (25.4 mm) |

## OPERATING CHARACTERISTICS

**Environmental**

- Operating temperature: Thermal transfer = 41º F/5º C to 104º F/40º C Thermal direct = 32º F/0º C to 104º F/40º C
- Storage temperature: -40º F/-40º C to 140º F/60º C
- Operating humidity: 20% to 85% non-condensing R.H.
- Storage humidity: 5% to 85% non-condensing R.H.

**Electrical**

- Universal power supply with power-factor correction 90-264 VAC, 48-62 Hz

**Agency approvals**


**RELATED PRODUCTS**

**Options and Accessories**

- Additional fonts
- RS-422/485 multi-drop (optional adaptor)
- Applicator interface
- Media supply spindle
- Media rewind spindle
- Linear PCMCIA cards
- ATA-Style PCMCIA cards or CompactFlash (CF) cards

**COMMUNICATIONS AND INTERFACE CAPABILITIES**

- High-speed serial interface
- High-speed bi-directional, IEEE 1284-1994 parallel interface
- RS-232C with DB9F connector
- USB 2.0 port

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**For More Information**

Contact your Zebra representative for additional printer specifications. For information on Zebra’s other printers, supplies, software and accessories, ask your reseller, call +1 800 423 0442, or visit our Web site www.rfid.zebra.com.
**BAR CODE/SYMBOLS**

- Linear

**FONTS AND GRAPHICS**

- Fonts and Character Sets
  - Contains UFST® from Monotype Imaging, Inc.
  - IBM® Code Page 850 International characters & graphic symbols
  - Smooth scalable font Ø (CG Triumvirate™ Bold Condensed) is expandable dot-by-dot, height and width independent, while maintaining edges to a max. 1500 x 1500 dots.
  - IBM Code Page 850 International Characters available in fonts A,B,D,E,F,G and Ø through software control.

- Graphic Features
  - Supports user defined fonts and graphics—including custom logos

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**Cutting-Edge Features**

- **Automatic inlay position calibration**
  - Only from Zebra! Saves users the time and frustration of manually calculating the inlay program position on new labels.

- **Multiple RFID power settings**
  - Users can adjust the RF power in response to various RFID protocols, transponder designs and sizes. This feature gives users unprecedented flexibility to accommodate tighter-pitch transponders.

- **Flexible inlay placement**
  - A Zebra exclusive since our very first printer/encoder, this feature lets users keep label formats intact while ensuring higher read rates.

- **Models for 4- and 6-inch label widths**
  - Gives users the flexibility to print and encode most popular label and transponder sizes. Zebra’s is the first 6-inch printer/encoder.

- **Easier programming**
  - The Zebra Programming Language is now even better! We streamlined it to make it more intuitive and easier to use while ensuring continued support to legacy ZPL applications.

- **Front panel display offers**
  - More detailed information on tag data, error status and self-test, ensuring that support personnel have the information they need to optimize production and get the maximum quality output from each roll of smart labels.

- **Flash upgradeable**
  - Assures maximum flexibility for upgradeability to future protocols like EPCglobal’s Gen2, and other future RFID protocols as they evolve.

- **Faster throughput**
  - Eliminated backfeed for RFID batches and faster VOID printing means better overall smart label printing performance.

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