Zebra® R110Xi4™ RFID printer/encoder

Innovation and flexibility in RFID printer/encoders

With Zebra's R110Xi4 RFID printer/encoder – optimised for high-volume operations – you can print and encode a variety of UHF radio frequency identification smart labels for a multitude of applications, from small, high-resolution (600dpi) healthcare specimen smart labelling and item-level tagging to RFID pallet/carton labelling with print widths up to 102mm/4".

As Zebra's third-generation R*Xi*™ series printer/encoder, the R110Xi4 is designed with innovative, industry-leading features to meet the demands of current and future applications, and leverages the built-to-last Xi4™ printer platform for robust performance.

R110Xi4 printer/encoder offers high resolution (23.5 dots per mm/600dpi) for enhanced print quality on smaller labels, such as component smart labels. Versions with 8 dots per mm/203dpi or 12 dots per mm/300dpi are perfect for high-volume smart labelling, including parts and item-level tagging.

Auto-configuration, which enables encoding of a variety of different RFID tags, simplifies setup. And by encoding RFID inlays that are spaced closer together (16mm/0.6") than other-brand printer/encoders, the R110Xi4 enables lower cost per label, fewer media-roll changes and faster throughput.

Adaptive RFID encoding technology with variable inlay detection capability ensures the highest encoding accuracy in the industry. You can even use media converted for other printer/encoders thanks to Zebra's ability to detect variable inlay placement. If you don't need printed labels, the direct-to-inlay encoding capability means even more media savings.

Organisations with multinational supply chains can easily deploy the same R110Xi4 printer/encoder model in multiple countries thanks to Zebra's global certification process.

The high-performance R110Xi4 is designed for item-, case- and pallet-level identification.

Streamline business improvement and supply-chain management applications such as:

- Item-level tracking for apparel and other retail item tagging
- Package verification
- Work in process
- Product authentication
- Document-/asset-tracking
- Inventory management
- Shipping/receiving verification
- Distribution
- Healthcare specimen tracking

Specifications at a glance*

Standard features
- Dependable print quality – on-board diagnostics ensure optimum print quality
- Large easy-to-read front panel with multilingual back-lit LCD display. Menu supports a wide variety of languages – great for multinational operations
- Bi-fold media door with clear panel
- Improved ribbon- and media-low LCD/network alerts
- Thin film printhead with E^3™ Element Energy Equalizer™
- Dual media sensors – transmissive and reflective, selectable through software or front panel
- Real-time clock

RFID
- Fully integrated UHF EPC Gen 2 V1.2/ISO 18000-6C RFID reader/encoder
- Prints and encodes EPC Gen 2 tags with a pitch of 16mm/0.6"
- Adaptive encoding technology automatically selects optimum encode settings
- Auto-tag calibration for label lengths of 51mm/2" or greater
- Variable inlay placement supports a range of inlay positions for maximum media flexibility
- RFID counters keep track of the good and bad labels
- RFID processes optimised for fastest label throughput
- RFID ZPL® commands allow ease of RFID setup with maximum flexibility
- Variable RFID power settings for both read and write allow maximum flexibility for printing small labels

Printer specifications

Resolution
- 8 dots per mm/203dpi
- 12 dots per mm/300dpi
- 23.5 dots per mm/600dpi

Memory
- 8MB flash; 16MB RAM

Print width
- 102mm/4.0"

Print length
- 3810mm/150"

Print speed
- 356mm/14" per second at 203dpi
- 305mm/12" per second at 300dpi
- 152mm/6" per second at 600dpi

Media sensors
- Transmissive and reflective

Physical characteristics
- Width: 261.9mm/10.31"
- Height: 393.7mm/15.5"
- Depth: 517.5mm/20.38"
- Weight: 22.7kg/50lb

Operating characteristics

Environmental
- Operating temperature:
  5°C/40°F to 40°C/105°F (thermal transfer)
  0°C/32°F to 40°C/105°F (direct thermal)
- Storage/transport environment:
  -40°C/-40°F to 60°C/140°F
- Operating humidity: 20–85% non-condensing
- Storage humidity: 5–85% non-condensing

Electrical
- 90–264VAC; 48–62Hz

Agency approvals
- IEC 60950-1, EN 55022 Class B, EN 55024, EN 61000-3-2, EN 61000-3-3

Product markings
- FCC-B, C-Tick

Media characteristics

Labels
- Minimum non-continuous label length:
  - 6mm/0.25" – Rewind mode
  - 13mm/0.5" – Peel mode
  - 18mm/0.7" – Tear-off mode
  - 38mm/1.5" – Cutter mode
- Maximum label and liner width: 20mm/0.79" to 114mm/4.5"
- Maximum media roll size: 203mm/8" O.D. on a 76mm/3" I.D. core
- Media thickness: 0.076mm/0.003" to 0.305mm/0.012"
- Media types: Continuous, die-cut, black mark, notch

Ribbons
- Outside diameter: 81.3mm/3.2"
- Standard length: 450m/1476' or 300m/984'
- Ratio: 2:3 media-roll to ribbon
- Ribbon setup: Coated side out
- Core inner diameter (I.D.): 25.4mm/1"

ZebraLink™ tools

Networking
- Serial RS-232 and bi-directional parallel ports with auto-detect
- USB 2.0 port

Firmware
- ZPL II® programming language – selectable through software or front panel
- XML-enabled printing

Fonts/graphics/symbologies

Fonts and character sets
- Bitmap fonts A to H and GS symbols are expandable up to 10 times, height- and width-independent
- Smooth scalable font Ø (CG Triumvirate™ Bold Condensed) is expandable dot-by-dot, height- and width-independent
- IBM® Code Page 850 international characters
- Contains UFST® from Monotype Imaging, Inc.

Graphic features
- Supports user-defined fonts and graphics – including custom logos

Barcode symbologies
- Barcode ratios: 2:1, 7:3, 5:2 and 3:1
- Linear barcodes: Codabar, Code 11, Code 39, Code 93, Code 128 with subsets A/B/C and UCC Case Codes, EAN-8, EAN-13, Industrial 2-of-5, Interleaved 2-of-5, ISBT-128, Logmars, MSI, Planet Code, Plessey, Postnet, Standard 2-of-5, UPC-A, UPC-E, UPC and EAN 2- or 5-digit extensions
- Two-dimensional: Aztec Code, Codablock, Code 49, Data Matrix, MaxiCode, MicroPDF, PDF417, QR Code, RSS-14 (and composite), TLC 39

Communication and interface capabilities
- ZebraNet® 10/100 Print Server supports 10Base-T, 100Base-TX and fast Ethernet 10/100 auto-switching networks
- USB 2.0 – 12Mbits/second
- High-speed bi-directional parallel interface – IEEE 1284-1994 compatibility, ECP, nibble mode
- High-speed serial interfaces: RS-232C with DB-9F connector, optional converter for DB-25F available
- Optional RS-422/485 with multidrop capability to network multiple printers from a single host with external adaptor
- Software (XON/XOFF) or hardware (DTR/DSR) communication handshake protocols
- ZebraNet Wireless Plus Print Server supports advanced wireless securities
- Applicator interface with DB-15F connector

Options and accessories

Printer options
- Clear media side bi-fold door – allows smaller media door opening radius
- Full-width rotary knife cutter and catch tray operates under software control cutting labels individually or in strips
- Media rewind spindle rewinds finished roll internally onto 76mm/3" core or enables label peel and liner rewind
- Applicator interface provides status and control signals for applicators and remote-control devices
- Media supply spindle for 76mm/3" core or 40mm/15.7" core
- Flash memory – factory-installed 64MB (61MB user-available)
- Additional fonts

ZebraNet Print Server options
- Web View Web pages – connect and control Zebra barcode printers via the printer's Web interface using common Internet browsers
- Alerts – provide alerts via any e-mail-enabled, wired or wireless device to minimise downtime
- ZebraNet Wireless Plus Print Server

Zebra Technologies – EMEA Headquarters & Sales Office
Zebra Technologies Europe Limited, Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5XF, United Kingdom
Telephone: +44 (0)1628 556000   **Fax:** +44 (0)1628 556001   **E-mail:** mseurope@zebra.com   **Web:** www.zebra.com

Other EMEA Locations
Europe: France, Germany, Italy, the Netherlands, Poland, Spain, Sweden   **Middle East & Africa:** Dubai, South Africa