



ZT411 Industrial Printer

Specifications are provided for reference and are based on testing the ZT411™ printer using genuine Zebra® supplies. Results may vary in actual application settings or when using other-than-recommended Zebra supplies. Zebra recommends always qualifying any application with thorough testing.

Standard Features

Printing

- Thermal transfer and direct thermal printing
- Thin film printhead with E3™ Element Energy™ Equalizer for superior print quality
- 203 dpi print resolution (8 dots / mm)
- Print speed per second up to 14" (356 mm / second)

Communication

- USB 2.0, high speed
- RS-232 Serial (RS-232C with DB9F connector; Configurable baud rate (2400 – 115,200kb), parity, and data bits. Stop bits at 1 or 2; Software (XON/XOFF), hardware (DTR/DSR or RTS/CTS) communication handshake protocols)
- 10/100 Ethernet: Supports networks internally integrated option that enables the use of Webview and Alert features
- Bluetooth® 4.1 (including Apple®)
- Dual USB Host

Operation

- 4.3-inch color touch display with intuitive menu for quick operation and settings management
- Bi-colored status LEDs for quick printer status
- ARM Cortex A7 processor
- 256 MB RAM memory (8 MB User Available)
- 512 MB Flash memory (64 MB User Available)
- Print Touch™ application
- Link-OS®-enabled
- Auto-switching 100-240V power supply
- ENERGY STAR® qualified
- Printhead element out detection



Media Support

- Dual media sensors — transmissive and reflective
- 3" media supply hanger
- Auto calibration when printer is turned on or when printhead is closed

Design

- Easy, side-loading metal print mechanism
- Tool-less printhead and platen replacement
- Metal media cover with enlarged clear viewing window
- Robust-gold user touch points indicating key adjustments
- Bi-fold media door decreasing overall operating space by 35%

Firmware

- Resident ZPL®, ZPL II® and EPL™ programming languages, selectable through software or front panel
- XML-Enabled Printing — allows XML communications for barcode label printing eliminating license fees and printer server hardware while lowering customization and programming costs

Optional Features

Printheads / Resolution

- Printhead 203 dpi (8 dots / mm)
- Printhead 300 dpi (12 dots / mm)
- Printhead 600 dpi (24 dots / mm)

Communication

- Parallel (Bi-directional interface)
- Wireless dual radio with 802.11ac Wi-Fi and Bluetooth 4.1
- 10/100 Ethernet
- Applicator interface

Media Handling

- **Rewind** — Internally rewinds a full roll of printed labels on 3" core, or peels and rewinds liner (factory installed only)
- **Peel** — Choice of two options:
 - Front mount, passive peel option
 - Liner take-up option — Additional full-roll liner take-up spindle accommodates standard printer base
- **Cutter** — Front-mount guillotine cutter and catch tray, operates under software control cutting labels individually, or in strips (not compatible with rewind and peel options)
- 1" I.D. Core media supply hanger
- Ink-side-in ribbon supply spindle

Fonts

Asian and other international scalable and smooth bitmapped fonts

Power Cords

US, Europe / UK, Israel, China, Japan, Australia, Argentina, Brazil and Taiwan

RFID

- Fully integrated ThingMagic® UHF EPC Gen 2 V2.0/ISO 18000-63 RFID Reader / Encoder
- Prints and encodes tags with a minimum pitch of 0.6" / 16 mm
- Adaptive Encoding Technology simplifies RFID setup and eliminates complex RFID placement guidelines
- Field-installable on-metal RFID kit available for 203 and 300 dpi

ZKDU Keyboard Display Unit

Enter variable data and retrieve stored forms for standalone applications (requires null modem adapter with DB9 serial cable)

ZBI 2.0™

Field installed via activation key

Print Specifications

Parameter	203 dpi (8 dots / mm)	300 dpi (12 dots / mm)	600 dpi (24 dots / mm)
Dot Size (W × L):	0.0049" × 0.0049" (0.125 mm × 0.125 mm)	0.0033" × 0.0039" (0.084 mm × 0.099 mm)	0.0016" × 0.0016" (0.042 mm × 0.042 mm)
Maximum Continuous Media Print Length	157" (3988 mm)	73" (1857 mm)	39" (991 mm)
Maximum Print Width	4.09" (104 mm)	4.09" (104 mm)	4.09" (104 mm)
Programmable Print Speeds (per second)	2.4" through 14" (61 mm – 356 mm) in 1" increments	2.4" through 10" (61 mm – 254 mm) in 1" increments	1.5" through 4" (38 mm – 102 mm) in 1" increments

- First Dot Location: Measured from inside media backing edge: 0.10" ±0.04" (2.5 mm, not to exceed -.5 mm +1.0 mm)
- Media Registration Tolerance:
 - Vertical = <±0.039" (±1.0 mm) on non-continuous media
 - Horizontal = <±0.039" (±1.0 mm) within a roll of media

Media Specifications

- Media Types: Continuous, die-cut, notch, black-mark
- Maximum Label and Liner Length:
 - 39" (991 mm) non-continuous — 203 dpi, 300 dpi
 - 20" (508 mm) non-continuous — 600 dpi
- Media Web Width (Label and Liner):
 - 1.00" (25.4 mm) to 4.50" (114 mm) Tear / Cutter
 - 1.00" (25.4 mm) to 4.25" (108 mm) Peel / Rewind
- Minimum Label Length:
 - Tear-off mode: 0.5" (12.7 mm)
 - Peel mode: 0.5" (12.7 mm)
 - Rewind mode: 0.5" (12.7 mm)
 - Cutter: 1.00" (25.4 mm)
- Media Thickness (Label and Liner):
 - 0.0023" (0.058 mm) to 0.010" (0.25 mm)
- Maximum Media Roll Dimensions:
 - 8.0" (203 mm) O.D. on a 3" (76 mm) I.D. core