ZT600 Series Industrial Printers

Specifications are provided for reference and are based on printer tests using Zebra Certified 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.

**ZT600 STANDARD FEATURES**

- Easy Side-Loading print mechanism
- Cableless Quick Change Platen
- Full-function front panel and 3.5 inch multilingual color non-touch 320x240 pixel LCD display – with user-programmable password protection
- Clear media side bi-fold door allows shorter media door opening radius, and easy monitoring of supplies usage without opening the printer
- Thin film printhead – with E3® Element Energy Control Equalizer™
- 1GB SDRAM (32 MB User Available)
- 2 GB on board Flash memory (512 MB User Available)
- Cortex A9 800MHz Processor
- Serial RS-232, Full Speed (12Mbps) USB 2.0, BT4.0, static NFC tag, and Auto-switching Gigabit Ethernet
- Two front mounted USB Host ports
- Dual media sensors – transmissive and reflective, selectable through software or front panel
- Real-time Clock (RTC)
- Energy Star Qualified

**Firmware**

- ZPL® or ZPL II® programming language – selectable through software or front panel
- XML-Enabled Printing – direct connect integration for barcode label printing; eliminates license fees and print server hardware and lowers customization and programming costs

**OPTIONAL FEATURES**

- Modular full-width guillotine style cutter with catch tray – operates under software control cutting labels individually or in strips (not compatible with rewind and peel options)
- Media rewind spindle – rewinds finished roll internally onto 3" (76 mm) core or enables label peel and liner rewind
- Ribbon Spindle- Support for ribbon coated side in
- Applicator interface – provides status and control signals for applicators and remote control devices
- Additional fonts options
- RFID capabilities (UHF EPC Gen 2, v.2 Class 1 compliant)
- Internal IPv4 10/100/1000 Wired Print Server Option Card
- IEEE 1284 Parallel Port
- SEH PS105-Z External IPv6 Print Server (requires Parallel port option)
- 802.11ac Print Server Option card

*Not available in all Regions.*
TECHNICAL SPECIFICATIONS
ZT600 SERIES INDUSTRIAL PRINTERS

PRINTER OPERATION
• Thermal transfer and direct thermal printing of barcodes, text and graphics
• Advanced label/media counters
• Auto calibration – printer calibrates when printer is turned on or when printhead is closed using approximately two labels
• Early Warning Systems – Clean printhead alerts via the front panel and ZebraLink Alerts

LINK-OS® SOFTWARE TOOLS
• Document Design: Quickly design a customized print solution using your business data and Zebra’s intuitive, plug-and-print design tools
• Printer Integration: Zebra offers apps and products designed to help you integrate Zebra devices into your existing systems
• Printer Management: Manage your print operations locally and globally with Zebra’s suite of device management tools
• Developer Tools: Provides you with the tools you need to create your own apps, including documentation, source code, programming languages, templates and more
• Zebra Setup Utility: Single-printer configuration utility
ZebraDesigner Printer Driver – for Microsoft® Windows® 7, 8, 10, Server 2008, Server 2012, Vista operating systems

ENVIRONMENTAL SPECIFICATIONS
• Operating environment:
  - Thermal transfer = 40°F to 104°F (5º to 40ºC)
  - Direct thermal = 32°F to 104°F (0º to 40ºC)
  - 20% to 85% non-condensing relative humidity
• Storage/transportation environment:
  - – 22°F to 140°F (– 30º to 60ºC)
  - 20% to 85% non-condensing relative humidity

FONT SPECIFICATIONS
• Fonts A, B, C, D, E, F, G, H and GS are expandable up to 10 times, height and width independently. However, fonts E and H (OCR-A and OCR-B) are not considered “in-spec” when expanded.
• The scalable smooth font 0 (CG Triumvirate™ Bold Condensed*) is expandable on a dot-by-dot basis, height and width independent, while maintaining smooth edges. Maximum character size depends on available memory.
• IBM Code Page 850 international character sets are available in the fonts A, B, C, D, E, F, G and 0 through software control
• Code Page 1250, 1252, 1253, 1254, 1255 Support with font 0
**Contains UFST® from Agfa Monotype Corporation

COMMUNICATIONS SPECIFICATIONS
• USB 2.0, full-speed (12Mbps)
• 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)
• Gigabit internal Ethernet supports networks internally integrated option that enables the use of Webview and Alert features
• Bluetooth® 4.0
• Dual front mounted (full-speed) USB Host ports
(ZPL AND ZPL II)
- Communicates in printable ASCII characters
- Unicode™ - Compliant
- Compatible with mainframe, mini and PC hosts
- downloadable objects include graphics, scalable and bitmap fonts, label templates and formats
- Object copying between memory areas (RAM, Onboard Flash memory locations)
- Adjustable print cache
- Data compression
- Automatic memory allocation for format while printing
- Automatic serialization of fields
- Format inversion (white on black)
- Mirror-image printing
- Four position field rotation (0°, 90°, 180°, 270°)
- Slew command
- Programmable label quantities with print, pause, cut control
- User-programmable password
- Status messages to host on request

BARCODE SYMBOLOGIES
AND SPECIFICATIONS
- Barcode ratios: 2:1, 7:3, 5:2 and 3:1
- 2-dimensional barcodes: Codablock, PDF417, Code 49, DataMatrix, MaxiCode, QR Code, TLC 39, MicroPDF, RSS-14 (and composite), Aztec

ZT610
Printing Specifications
- Height: 15.58" (395.68 mm)
- Width: 10.56" (268.2 mm)
- Depth: 19.88" (505.0 mm)
- Weight: 50 lbs. (22.7 kg)

Media Specifications
- Media type: continuous, die-cut, notch, hole, or black mark
- Media width (label and liner): 0.79" (20 mm) to 4.5" (114 mm)
- Minimum label length:
  - ZT610 - 203/300 DPI
    - Rewind mode: 0.25" (6 mm)
    - Peel mode: 0.5" (13 mm)
    - Tear-off mode: 0.7" (18 mm)
    - Cutter mode: 1.5" (38 mm)
  - ZT610 - 600 DPI
    - Rewind mode: 0.125" (3 mm)
    - Peel mode: 0.5" (13 mm)
    - Tear-off mode: 0.125" (3 mm)
    - Cutter mode: 1.5" (38 mm)
- Media thickness (label and liner):
  - 0.003" (0.076 mm) to 0.012" (0.305 mm) non-cutter
- Maximum media roll size:
  - 8.0" (203 mm) outside diameter on a 3" (76 mm) inside diameter core
- Transmissive (gap) sensing standards:
  - Interlabel gap: 2-4 mm, preferably 3 mm
  - Sensing notch: 0.25" W (6 mm) × 0.12" L (3 mm)
  - Sensing hole: 0.125" (3 mm) diameter
- Reflective (black mark) sensing standards:
  - Black mark length (parallel to inside media edge): 0.12"-0.43" (3-11 mm)
  - Black mark width (perpendicular to inside media edge): 0.43" (> 11 mm)
  - Black mark location: within 0.040" (1 mm) of inside media edge
  - Black mark density: >1.0 Optical Density Units (ODU)
  - Maximum media density: 0.5 ODU

Ribbon Specifications
- Standard lengths: 1476' (450 m)
- Provides 3:1 media roll to ribbon ratios
- Maximum ribbon roll size:
  - 3.2" (81.3 mm) outside diameter on a 1.0" (25.4 mm) inside diameter core
  - Ribbon wound coated-side out
  - Ribbon width: 0.79" (20 mm) to 4.33" (110 mm)

Electrical Specifications
- 250 watt rated Universal power supply with power-factor correction 90–265 VAC, 47–63 Hz
- Agency approvals: IEC 60950-1, EN 55022 Class B, EN 55024, EN 61000-3-2, EN 61000-3-3
- Product Markings: cTUVus, CE, FCC-B, ICES-003, VCCI, C-Tick, NOM, S-Mark(Arg), CCC, GOST-R, BSMI, KCC, STB, and UkrSEPRO
MEDIA REGISTRATION AND MINIMUM LABEL LENGTH ARE AFFECTED BY MEDIA TYPE AND WIDTH, RIBBON TYPE, AND PRINT SPEED. PERFORMANCE IMPROVES AS THESE FACTORS ARE OPTIMIZED. ZEBRA RECOMMENDS ALWAYS QUALIFYING ANY APPLICATION WITH THOROUGH TESTING.

**ZT610 203 DPI**

**Printing Specifications**
- 203 dpi resolution (8 dots/mm)
- Heater dimension (W × L): 0.0043" × 0.0052" (0.110 mm × 0.132 mm)
- First dot location measured from inside media edge: 0.14" ±0.05" (3.5 mm ±1.25 mm)
- Maximum print width: 832 dots 4.09" (104 mm)
- Maximum non-continuous media print length 39" (991 mm)
- Maximum continuous media print length 150" (3810 mm)
- Media registration tolerance: *
  - Vertical:
    - ± 0.30 mm at print speeds at or below 4 ips
    - ± 0.50 mm at print speeds 5 - 6 ips
    - ± 1.5mm at speeds greater than 6ips
  - Horizontal: ± 0.060" (± 1.5 mm)
- Programmable print speeds (inches per second): 2, 4, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
- Barcode modulus “X” dimension:
  - Picket fence (non-rotated) orientation: 4.9 mil to 49 mil
  - Ladder (rotated) orientation: 4.9 mil to 49 mil

**FONT SPECIFICATIONS (203DPI) 8 DOT/MM**

<table>
<thead>
<tr>
<th>Font</th>
<th>Matrix (in dots) (H × W)</th>
<th>Type†</th>
<th>Minimum Character Size (H × W) in inches (mm)</th>
<th>Max CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9 × 5</td>
<td>U-L-D</td>
<td>0.044 × 0.029 (1.1 × 0.74)</td>
<td>33.9</td>
</tr>
<tr>
<td>B</td>
<td>11 × 7</td>
<td>U</td>
<td>0.054 × 0.044 (1.37 × 1.1)</td>
<td>22.6</td>
</tr>
<tr>
<td>C, D</td>
<td>18 × 10</td>
<td>U-L-D</td>
<td>0.088 × 0.059 (2.2 × 1.5)</td>
<td>16.9</td>
</tr>
<tr>
<td>E</td>
<td>28 × 15</td>
<td>OCR-B</td>
<td>0.138 × 0.098 (3.5 × 2.5)</td>
<td>10.1</td>
</tr>
<tr>
<td>F</td>
<td>26 × 13</td>
<td>U-L-D</td>
<td>0.128 × 0.079 (3.3 × 2.0)</td>
<td>12.7</td>
</tr>
<tr>
<td>G</td>
<td>60 × 40</td>
<td>U-L-D</td>
<td>0.295 × 0.236 (7.5 × 6.0)</td>
<td>4.2</td>
</tr>
<tr>
<td>H</td>
<td>21 × 13</td>
<td>OCR-A</td>
<td>0.103 × 0.093 (2.6 × 2.4)</td>
<td>10.7</td>
</tr>
<tr>
<td>GS</td>
<td>24 × 24</td>
<td>SYMBOL</td>
<td>0.118 × 0.118 (3.0 × 3.0)</td>
<td>8.4</td>
</tr>
<tr>
<td>P</td>
<td>20 × 18</td>
<td>U-L-D</td>
<td>0.098 × 0.089 (2.50 × 2.25)</td>
<td>N / A</td>
</tr>
<tr>
<td>Q</td>
<td>28 × 24</td>
<td>U-L-D</td>
<td>0.138 × 0.113 (3.50 × 3.00)</td>
<td>N / A</td>
</tr>
<tr>
<td>R</td>
<td>35 × 31</td>
<td>U-L-D</td>
<td>0.172 × 0.153 (4.38 × 3.88)</td>
<td>N / A</td>
</tr>
<tr>
<td>S</td>
<td>40 × 35</td>
<td>U-L-D</td>
<td>0.197 × 0.172 (5.00 × 4.38)</td>
<td>N / A</td>
</tr>
<tr>
<td>T</td>
<td>48 × 42</td>
<td>U-L-D</td>
<td>0.236 × 0.207 (6.00 × 5.25)</td>
<td>N / A</td>
</tr>
<tr>
<td>U</td>
<td>59 × 53</td>
<td>U-L-D</td>
<td>0.290 × 0.261 (7.38 × 6.63)</td>
<td>N / A</td>
</tr>
<tr>
<td>V</td>
<td>80 × 71</td>
<td>U-L-D</td>
<td>0.394 × 0.349 (10.0 × 8.88)</td>
<td>N / A</td>
</tr>
<tr>
<td>Ø</td>
<td>variable</td>
<td>U-L-D</td>
<td>variable</td>
<td>N / A</td>
</tr>
</tbody>
</table>

*U—Uppercase  L—Lowercase  D—Descenders

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* Media registration and minimum label length are affected by media type and width, ribbon type, and print speed. Performance improves as these factors are optimized. Zebra recommends always qualifying any application with thorough testing.
ZT610 300 DPI

Printing Specifications

- 300 dpi resolution (11.8 dots/mm)
- Heater dimension (W x L): 0.0027" x 0.0043" (0.0697 mm x 0.110 mm)
- First dot location measured from inside media edge: 0.08" ±0.05" (2.1 mm ±1.25 mm)
- Maximum print width: 14.09" (357 mm)
- Maximum non-continuous media print length: 39" (991 mm)
- Maximum continuous media print length: 100" (2540 mm)
- Media registration tolerance:
  - Vertical:
    o ± 0.30 mm at print speeds at or below 4 ips
    o ± 0.50 mm at print speeds 5 - 6 ips
    o ± 1.5 mm at speeds greater than 6 ips
  - Horizontal: ± 0.060" (± 1.5 mm)
- Programmable print speeds (inches per second): 2, 4, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
- Barcode modulus “X” dimension:
  - Picket fence (non-rotated) orientation: 3.3 mil to 33 mil
  - Ladder (rotated) orientation: 3.9 mil to 39 mil

FONT SPECIFICATIONS (300DPI) 12 DOT/MM

<table>
<thead>
<tr>
<th>Font</th>
<th>Matrix (in dots) (H x W)</th>
<th>Type†</th>
<th>Minimum Character Size (H x W) in inches (mm)</th>
<th>Max CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9 x 5</td>
<td>U-L-D</td>
<td>0.030 x 0.020 (0.76 x 0.51)</td>
<td>50.0</td>
</tr>
<tr>
<td>B</td>
<td>11 x 7</td>
<td>U</td>
<td>0.037 x 0.030 (0.94 x 0.76)</td>
<td>33.3</td>
</tr>
<tr>
<td>C, D</td>
<td>18 x 10</td>
<td>U-L-D</td>
<td>0.060 x 0.040 (1.5 x 1.0)</td>
<td>25.0</td>
</tr>
<tr>
<td>E</td>
<td>28 x 15</td>
<td>OCR-B</td>
<td>0.137 x 0.087 (3.5 x 2.2)</td>
<td>11.5</td>
</tr>
<tr>
<td>F</td>
<td>26 x 13</td>
<td>U-L-D</td>
<td>0.087 x 0.053 (2.2 x 1.3)</td>
<td>18.8</td>
</tr>
<tr>
<td>G</td>
<td>60 x 40</td>
<td>U-L-D</td>
<td>0.200 x 0.160 (5.1 x 4.1)</td>
<td>6.3</td>
</tr>
<tr>
<td>H</td>
<td>21 x 13</td>
<td>OCR-A</td>
<td>0.100 x 0.093 (2.5 x 2.37)</td>
<td>10.7</td>
</tr>
<tr>
<td>GS</td>
<td>24 x 24</td>
<td>SYMBOL</td>
<td>0.080 x 0.080 (2.03 x 2.03)</td>
<td>12.5</td>
</tr>
<tr>
<td>P</td>
<td>20 x 18</td>
<td>U-L-D</td>
<td>0.067 x 0.060 (1.69 x 1.52)</td>
<td>N / A</td>
</tr>
<tr>
<td>Q</td>
<td>28 x 24</td>
<td>U-L-D</td>
<td>0.093 x 0.080 (2.37 x 2.03)</td>
<td>N / A</td>
</tr>
<tr>
<td>R</td>
<td>35 x 31</td>
<td>U-L-D</td>
<td>0.117 x 0.103 (2.96 x 2.62)</td>
<td>N / A</td>
</tr>
<tr>
<td>S</td>
<td>40 x 35</td>
<td>U-L-D</td>
<td>0.133 x 0.117 (3.39 x 2.96)</td>
<td>N / A</td>
</tr>
<tr>
<td>T</td>
<td>48 x 42</td>
<td>U-L-D</td>
<td>0.160 x 0.140 (4.06 x 3.56)</td>
<td>N / A</td>
</tr>
<tr>
<td>U</td>
<td>59 x 53</td>
<td>U-L-D</td>
<td>0.197 x 0.177 (5.00 x 4.49)</td>
<td>N / A</td>
</tr>
<tr>
<td>V</td>
<td>80 x 71</td>
<td>U-L-D</td>
<td>0.267 x 0.237 (6.77 x 6.01)</td>
<td>N / A</td>
</tr>
<tr>
<td>Ø</td>
<td>variable</td>
<td>U-L-D</td>
<td>variable</td>
<td>N / A</td>
</tr>
</tbody>
</table>

†U—Uppercase   L—Lowercase   D—Descenders

* Media registration and minimum label length are affected by media type and width, ribbon type, and print speed. Performance improves as these factors are optimized. Zebra recommends always qualifying any application with thorough testing.
ZT610 600 DPI

Printing Specifications

- 600 dpi resolution (23.62 dots/mm)
- Heater dimension: Each heater consists of a split element. Each half being 13 microns (μm) × 70 microns (μm)
- First dot location measured from inside media edge: 0.08” ±0.05” (2.1 mm ±1.25 mm)
- Maximum print width: 4.09” (104 mm)
- Maximum non-continuous media print length: 39” (991 mm)
- Maximum continuous media print length: 30” (762 mm)
- Media registration tolerance:
  - Vertical:
    - ± 0.20 mm at print speeds at or below 2 ips in tear mode, peel mode or rewind
    - ± 0.40 mm at print speeds at or below 2 ips in cutter mode
    - ± 0.43 mm at print speeds 3 - 6 ips in tear-off or cutter mode
    - ± 0.37 mm at print speeds 3 - 6 ips when using a rewinder or peel mode
  - Horizontal: ± 1.5 mm
- Programmable print speeds (inches per second): 1, 2, 3, 4, 5, 6
- Barcode modulus “X” dimension:
  - Picket fence (non-rotated) orientation: 1.6 mil to 16 mil
  - Ladder (rotated) orientation: 1.6 mil to 16 mil

Font Specifications (600DPI) 24 DOT/MM

<table>
<thead>
<tr>
<th>Font</th>
<th>Matrix (in dots) (H × W)</th>
<th>Type†</th>
<th>Minimum Character Size (H × W) in inches (mm)</th>
<th>Max CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9 × 5</td>
<td>U-L-D</td>
<td>0.015 × 0.010 (0.38 × 0.25)</td>
<td>100.0</td>
</tr>
<tr>
<td>B</td>
<td>11 × 7</td>
<td>U</td>
<td>0.018 × 0.015 (0.45 × 0.38)</td>
<td>66.7</td>
</tr>
<tr>
<td>C, D</td>
<td>18 × 10</td>
<td>U-L-D</td>
<td>0.030 × 0.020 (0.77 × 0.51)</td>
<td>50.0</td>
</tr>
<tr>
<td>E</td>
<td>28 × 15</td>
<td>OCR-B</td>
<td>0.137 × 0.087 (3.4 × 2.2)</td>
<td>11.54</td>
</tr>
<tr>
<td>F</td>
<td>26 × 13</td>
<td>U-L-D</td>
<td>0.043 × 0.027 (1.1 × 0.69)</td>
<td>37.5</td>
</tr>
<tr>
<td>G</td>
<td>60 × 40</td>
<td>U-L-D</td>
<td>0.100 × 0.080 (2.5 × 2.0)</td>
<td>12.5</td>
</tr>
<tr>
<td>H</td>
<td>21 × 13</td>
<td>OCR-A</td>
<td>0.100 × 0.093 (2.5 × 2.4)</td>
<td>10.71</td>
</tr>
<tr>
<td>GS</td>
<td>24 × 24</td>
<td>SYMBOL</td>
<td>0.040 × 0.040 (1.0 × 1.0)</td>
<td>25.0</td>
</tr>
<tr>
<td>P</td>
<td>20 × 18</td>
<td>U-L-D</td>
<td>0.033 × 0.030 (0.85 × 0.77)</td>
<td>N / A</td>
</tr>
<tr>
<td>Q</td>
<td>28 × 24</td>
<td>U-L-D</td>
<td>0.047 × 0.040 (1.19 × 1.02)</td>
<td>N / A</td>
</tr>
<tr>
<td>R</td>
<td>35 × 31</td>
<td>U-L-D</td>
<td>0.059 × 0.052 (1.49 × 1.32)</td>
<td>N / A</td>
</tr>
<tr>
<td>S</td>
<td>40 × 35</td>
<td>U-L-D</td>
<td>0.067 × 0.059 (1.70 × 1.49)</td>
<td>N / A</td>
</tr>
<tr>
<td>T</td>
<td>48 × 42</td>
<td>U-L-D</td>
<td>0.080 × 0.070 (2.04 × 1.79)</td>
<td>N / A</td>
</tr>
<tr>
<td>U</td>
<td>59 × 53</td>
<td>U-L-D</td>
<td>0.099 × 0.089 (2.51 × 2.25)</td>
<td>N / A</td>
</tr>
<tr>
<td>V</td>
<td>80 × 71</td>
<td>U-L-D</td>
<td>0.134 × 0.199 (3.40 × 5.06)</td>
<td>N / A</td>
</tr>
<tr>
<td>Ø</td>
<td>variable</td>
<td>U-L-D</td>
<td>variable</td>
<td>N / A</td>
</tr>
</tbody>
</table>

†U—Uppercase L—Lowercase D—Descenders

* Media registration and minimum label length are affected by media type and width, ribbon type, and print speed. Performance improves as these factors are optimized. Zebra recommends always qualifying any application with thorough testing.
ZT620

Printing Specifications
• Height: 15.58" (395.68 mm)
• Width: 13.44" (341.45 mm)
• Depth: 19.88" (505.00 mm)
• Weight: 57.4 lbs. (26 kg)

Media Specifications
• Media type: continuous, die-cut, notch, hole, or black mark
• Minimum label length:
  - Rewind mode: 0.25" (6 mm)
  - Peel mode: 0.5" (13 mm)
  - Tear-off mode: 0.7" (18 mm)
  - Cutter mode: 1.5" (38 mm)
• Media thickness (label and liner):
  - 0.003" (0.076 mm) to 0.007" (0.18 mm) cutter
  - 0.003" (0.076 mm) to 0.012" (0.305 mm)
• Maximum media roll size:
  - 8.0" (203 mm) outside diameter on a 3" (76 mm) inside diameter core
• Transmissive (gap) sensing standards:
  - Interlabel gap: 2-4 mm, preferably 3 mm
  - Sensing notch: 0.25" W (6 mm) × 0.12" L (3 mm)
  - Sensing hole: 0.125" (3 mm) diameter
• Reflective (black mark) sensing standards:
  - Black mark length (parallel to inside media edge): 0.12"-0.43" (3-11 mm)
  - Black mark width (perpendicular to inside media edge): 0.43" (> 11 mm)
  - Black mark location: within 0.040" (1 mm) of inside media edge
  - Black mark density: >1.0 Optical Density Units (ODU)
• Media width (label and liner): 2.0" (51 mm) to 7.1" (180 mm)

Ribbon Specifications
• Standard lengths: 1476' (450 m)
• Provides 3:1 media roll to ribbon ratios
• Maximum ribbon roll size: 3.2" (81.3 mm) outside diameter on a 1.0" (25.4 mm) inside diameter core
• Ribbon wound coated-side out
• Ribbon width: 2.0" (51 mm) to 6.7" (170 mm)

Electrical Specifications
• 250 watt rated Universal power supply with power-factor correction 90–265 VAC, 47–63 Hz
• Agency approvals: IEC 60950-1, EN 55022 Class B, EN 55024, EN 61000-3-2, EN 61000-3-3
• Product Markings: cTUVus, CE, FCC-B, ICES-003, VCCI, C-Tick, NOM, S-Mark(Arg), CCC, GOST-R, BSMI, KCC, STB, and UkrSEPRO

* Media registration and minimum label length are affected by media type and width, ribbon type, and print speed. Performance improves as these factors are optimized. Zebra recommends always qualifying any application with thorough testing.
**ZT620 203 DPI**

**Printing Specifications**

- 203 dpi resolution (8 dots/mm)
- Heater Dimension: 0.0043" x 0.0052" (0.110 mm x 0.132 mm)
- First dot location measured from inside media edge: - 0.10" ±0.035" (2.5 mm ±0.9 mm)
- Maximum print width: 1984 dots 6.6" (168 mm)
- Maximum non-continuous media print length: 39" (991 mm)
- Maximum continuous media print length: 80" (2032 mm)
- Media registration tolerance:
  - Vertical: ± 0.060" (± 1.5 mm)
  - Horizontal: ± 0.060" (± 1.5 mm)
- Programmable print speeds (inches per second): - 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
- Barcode modulus “X” dimension:
  - Picket fence (non-rotated) orientation: 4.9 mil to 49 mil
  - Ladder (rotated) orientation: 4.0 mil to 40 mil

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**FONT SPECIFICATIONS (203DPI) 8 DOT/MM**

<table>
<thead>
<tr>
<th>Font</th>
<th>Matrix (in dots) (H X W)</th>
<th>Type†</th>
<th>Minimum Character Size (H X W) in inches (mm)</th>
<th>Max CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9 × 5</td>
<td>U-L-D</td>
<td>0.044 × 0.029 (1.1 × 0.74)</td>
<td>33.9</td>
</tr>
<tr>
<td>B</td>
<td>11 × 7</td>
<td>U</td>
<td>0.054 × 0.044 (1.37 × 1.1)</td>
<td>22.6</td>
</tr>
<tr>
<td>C, D</td>
<td>18 × 10</td>
<td>U-L-D</td>
<td>0.088 × 0.059 (2.2 × 1.5)</td>
<td>16.9</td>
</tr>
<tr>
<td>E</td>
<td>28 × 15</td>
<td>OCR-B</td>
<td>0.138 × 0.098 (3.5 × 2.5)</td>
<td>10.1</td>
</tr>
<tr>
<td>F</td>
<td>26 × 13</td>
<td>U-L-D</td>
<td>0.128 × 0.079 (3.3 × 2.0)</td>
<td>12.7</td>
</tr>
<tr>
<td>G</td>
<td>60 × 40</td>
<td>U-L-D</td>
<td>0.295 × 0.236 (7.5 × 6.0)</td>
<td>4.2</td>
</tr>
<tr>
<td>H</td>
<td>21 × 13</td>
<td>OCR-A</td>
<td>0.103 × 0.093 (2.6 × 2.4)</td>
<td>10.7</td>
</tr>
<tr>
<td>GS</td>
<td>24 × 24</td>
<td>SYMBOL</td>
<td>0.118 × 0.118 (3.0 × 3.0)</td>
<td>8.4</td>
</tr>
<tr>
<td>P</td>
<td>20 × 18</td>
<td>U-L-D</td>
<td>0.098 × 0.089 (2.50 × 2.25)</td>
<td>N / A</td>
</tr>
<tr>
<td>Q</td>
<td>28 × 24</td>
<td>U-L-D</td>
<td>0.138 × 0.113 (3.50 × 3.00)</td>
<td>N / A</td>
</tr>
<tr>
<td>R</td>
<td>35 × 31</td>
<td>U-L-D</td>
<td>0.172 × 0.153 (4.38 × 3.88)</td>
<td>N / A</td>
</tr>
<tr>
<td>S</td>
<td>40 × 35</td>
<td>U-L-D</td>
<td>0.197 × 0.172 (5.00 × 4.38)</td>
<td>N / A</td>
</tr>
<tr>
<td>T</td>
<td>48 × 42</td>
<td>U-L-D</td>
<td>0.236 × 0.207 (6.00 × 5.25)</td>
<td>N / A</td>
</tr>
<tr>
<td>U</td>
<td>59 × 53</td>
<td>U-L-D</td>
<td>0.290 × 0.261 (7.38 × 6.63)</td>
<td>N / A</td>
</tr>
<tr>
<td>V</td>
<td>80 × 71</td>
<td>U-L-D</td>
<td>0.394 × 0.349 (10.0 × 8.88)</td>
<td>N / A</td>
</tr>
<tr>
<td>Ø</td>
<td>variable</td>
<td>U-L-D</td>
<td>variable</td>
<td>N / A</td>
</tr>
</tbody>
</table>

*U—Uppercase  L—Lowercase  D—Descenders
ZT620 300 DPI

Printing Specifications
- 300 dpi resolution (11.8 dots/mm)
- Heater dimension (W × L): 0.0027” × 0.0043” (0.0697 mm × 0.110 mm)
- First dot location measured from inside media edge:
  - 0.10” ±0.035” (2.5mm ±0.9 mm)
- Maximum print width:1984 dots 6.6” (168 mm)
- Maximum non-continuous media print length: 39” (991 mm)
- Maximum continuous media print length 80” (2032 mm)
- Media registration tolerance:
  - Vertical: ± 0.060” (± 1.5 mm)
  - Horizontal: ± 0.060” (± 1.5 mm)
- Programmable print speeds (inches per second): - 2, 3, 4, 5, 6, 7, 8
- Barcode modulus “X” dimension:
  - Picket fence (non-rotated) orientation:
    3.3 mil to 33 mil
  - Ladder (rotated) orientation:
    3.9 mil to 39 mil

<table>
<thead>
<tr>
<th>Font</th>
<th>Matrix (in dots) (H × W)</th>
<th>Type†</th>
<th>Minimum Character Size (H × W) in inches (mm)</th>
<th>Max CPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9 × 5</td>
<td>U-L-D</td>
<td>0.030 × 0.020 (0.76 × 0.51)</td>
<td>50.0</td>
</tr>
<tr>
<td>B</td>
<td>11 × 7</td>
<td>U</td>
<td>0.037 × 0.030 (0.94 × 0.76)</td>
<td>33.3</td>
</tr>
<tr>
<td>C, D</td>
<td>18 × 10</td>
<td>U-L-D</td>
<td>0.060 × 0.040 (1.5 × 1.0)</td>
<td>25.0</td>
</tr>
<tr>
<td>E</td>
<td>28 × 15</td>
<td>OCR-B</td>
<td>0.137 × 0.087 (3.5 × 2.2)</td>
<td>11.5</td>
</tr>
<tr>
<td>F</td>
<td>26 × 13</td>
<td>U-L-D</td>
<td>0.087 × 0.053 (2.2 × 1.3)</td>
<td>18.8</td>
</tr>
<tr>
<td>G</td>
<td>60 × 40</td>
<td>U-L-D</td>
<td>0.200 × 0.160 (5.1 × 4.1)</td>
<td>6.3</td>
</tr>
<tr>
<td>H</td>
<td>21 × 13</td>
<td>OCR-A</td>
<td>0.100 × 0.093 (2.5 × 2.37)</td>
<td>10.7</td>
</tr>
<tr>
<td>GS</td>
<td>24 × 24</td>
<td>SYMBOL</td>
<td>0.080 × 0.080 (2.03 × 2.03)</td>
<td>12.5</td>
</tr>
<tr>
<td>P</td>
<td>20 × 18</td>
<td>U-L-D</td>
<td>0.067 × 0.060 (1.69 × 1.52)</td>
<td>N / A</td>
</tr>
<tr>
<td>Q</td>
<td>28 × 24</td>
<td>U-L-D</td>
<td>0.093 × 0.080 (2.37 × 2.03)</td>
<td>N / A</td>
</tr>
<tr>
<td>R</td>
<td>35 × 31</td>
<td>U-L-D</td>
<td>0.117 × 0.103 (2.96 × 2.62)</td>
<td>N / A</td>
</tr>
<tr>
<td>S</td>
<td>40 × 35</td>
<td>U-L-D</td>
<td>0.133 × 0.117 (3.39 × 2.96)</td>
<td>N / A</td>
</tr>
<tr>
<td>T</td>
<td>48 × 42</td>
<td>U-L-D</td>
<td>0.160 × 0.140 (4.06 × 3.56)</td>
<td>N / A</td>
</tr>
<tr>
<td>U</td>
<td>59 × 53</td>
<td>U-L-D</td>
<td>0.197 × 0.177 (5.00 × 4.49)</td>
<td>N / A</td>
</tr>
<tr>
<td>V</td>
<td>80 × 71</td>
<td>U-L-D</td>
<td>0.267 × 0.237 (6.77 × 6.01)</td>
<td>N / A</td>
</tr>
<tr>
<td>Ø</td>
<td>variable</td>
<td>U-L-D</td>
<td>variable</td>
<td>N / A</td>
</tr>
</tbody>
</table>

†U—Uppercase    L—Lowercase    D—Descenders

For more information, visit www.zebra.com/zt600