**Optimum Printing Solutions for Ticketing Systems**

**The ITX Series**, based on Practical Automation’s state-of-the-art IT technology platform, is an innovative series of direct thermal ticket printers. Incorporating a 32-Bit controller platform, a choice of print widths, and a heavy-duty stepper driven cutter, these new printers are designed for use where high quality, fast printing, and long life are required.

**Optimized to work from character-based operating systems (DOS, Unix, Linux, etc.) or from Windows® using a supplied WYSIWYG driver.**

The easy-to-use command language facilitates printing of several resident fonts and bar codes in several sizes anywhere on the ticket. Also, the command language is compatible with application software written for popular industry standards including Practical Automation’s own ETX and LTX Series printers. The ITX Series delivers extensive status information over the interface. This status provides the host system with information such as, low paper, out of paper, ticket count, confirm ticket printed, error condition, etc.
Applications Include:
- Movie theater admissions
- Leisure/Event entertainment
- Transportation ticketing
- Museums/performing arts centers
- Private & municipal stadiums
- Recreational facilities

Choose a printer to match your needs.
The ITX Series desk/counter printers are available in four versions:

- **eITX** – A desktop style with a locked ticket storage compartment.
- **µITX** – Features a small footprint and an optional external ticket storage assembly.
- **pITX** – A vertically flush mounted countertop design.
- **kITX** – A kiosk mountable printer (request brochure for more details.)

All printers are available with either 203 or 300 dpi resolution. Additionally, the printers can be configured to use tickets ranging in size from two to four inches. Ticket stock is self loading.

The standard printer contains firmware that emulates the most commonly used ticket programming language or a Windows® compatible firmware that emulates WYSIWYG function is also available.

Choices for ticket separation include manual tear, auto cutters with ticket retainers, and auto cutters with ticket ejectors. The data interface can be IEEE 1284 Parallel, RS-232C Serial or USB.

**A Practical Ticket Storage Solution**

For the µITX and pITX printers, the GTX-THLP-2 and -4 Ticket Storage Assemblies are designed to conveniently hold up to 2.75 and 4.5-inch fanfold tickets with packaging, respectively. Tickets are neatly stored in a stack and prevented from spilling over. A “low” ticket sensor is used to provide an indication when stored tickets are running low. Users can now anticipate a ticket outage before it actually happens. The Model eITX printer incorporates an internal, locked ticket storage assembly.
### ITX Series Specifications

**Printing Method:** Direct thermal

**Print Head:**
- **Dot Density:** 203 DPI (8.0 dots/mm) ITX 2000
  - 300 DPI (11.8 dots/mm) ITX 3000
- **Dot Cycle Life:** 50 x 10^9 Dot Cycles (typical)
- **Abrasivity Life:** 2 million inches (50 million mm) typical
- **Operation:** Dot history controlled
- **Temperature:** Thermostat Controlled

**Print Speed:**
- ITX 2000: 10.0 in/sec Max. (254 mm/sec)
- ITX 3000: 8.0 in/sec Max. (203 mm/sec)

**Standard Resident Fonts:**
- 5x7, 5x9 (OCR), 8x16, 13x20 (OCR), 17x31 (OCR), 17x31 (OCR), 18x30 (Courier), 20x40 (Courier), 25x41 (Bold Prestige), 25x49 (Script), 30x52 (OCR), 46x91 (Orator)

**Standard Independent Bar Codes:**
- Code 39, Interleaved 2 of 5, EAN 13, EAN 8, UPC, USS-CODABAR, Code 128 B and C with optional human readable interpretation line

**Standard Graphics:**
- Dot addressable graphics; box and line drawing commands; downloadable fonts and logos; PCX file support; PCX image rotation (0, 90, 180, 270 degrees) and multiplication

**Printer Firmware Options:**
- **Standard:** The characteristics noted on this data sheet refer to the standard firmware version. This firmware "emulates" the most commonly used Standard Ticket Programming Language.
- **Windows:** The "G" version is available for ITX2000 and ITX3000 emulation in Windows® for WYSIWYG function. Printer firmware can be updated over the printer's Data Interface.

**Print Width:**
- ITX 2002: 1.89" (48.0 mm) (384 dots)
- ITX 2003: 2.15" (80.0 mm) (640 dots)
- ITX 2003A: 1.92" (48.8 mm) (576 dots)
- ITX 3002: 3.86" (98.0 mm) (784 dots)
- ITX 3004A: 3.89" (98.8 mm) (1168 dots)

**Print Length:**
- ITX 2002: 10.9" (276.9 mm) Max.
- ITX 2003: 11.75" (298.4 mm) Max.
- ITX 3002: 12.6" (319.8 mm) Max.

**Ticket Width:**
- 2.00" ± .015" (50.8 mm)
- 2.35" ± .015" (60.0 mm)
- 3.20" ± .015" (81.3 mm)

**Ticket Length:**
- 2.0" (50.8 mm) Min.
- 2.00" ± .015" (50.8 mm)
- 2.35" ± .015" (60.0 mm)
- 3.20" ± .015" (81.3 mm)

**Paper Type:** Thermal tag stock

**Paper Caliper:** 0.004" - 0.0075" (0.1 - 0.19 mm)

**Paper Feed:** Friction

**Data Interface (Plug-In Interface Options Modules):**
- **Parallel:** IEEE-1284 (bi-directional)
- **Serial:** RS-232 (Busy and XON/OFF) to 5.6 K baud
- **USB:** 2.0 Full Speed Compliant

**Special Purpose I/O:**
- 8 pin mini Din connector for low paper and auxiliary power driver

**Interface Cable:**
- IEEE-1284 A-B cable (DB25M/C36M)
- RS-232 Cable (DB9M/DB9F)
- USB A-B Cable (A/B)

**Cutter:**
- **Life:** 1.5 million cuts (typical) & 1.0 million cuts (minimum)
- **Cut Cycle Time:** 300 ms max.

**Power Requirements:**
- 24 VDC, 60 W max average, provided by PS60-14 universal input power supply. 90-264 VAC, 47/63 Hz, 0.45 A max.

**Power/Paper (green LED):**
- **Power On/Off**
- **Ready (green LED):**
- **Attention/Error (amber LED):**
- **Audio Beep:**

**Ticket Delivery Options:**
- **Desktop**
  - (µITX and eITX) Cutter and ejector (the ticket is ejected after cutting.)
  - Counter top (µITX) Cutter and retainer (the ticket is stacked and held after cutting.)
  - All Models: Can be configured with a tearbar (no cutter installed.)

**Setup Parameters:** All optional control features can be changed with a user-friendly switch panel entry.

**Printer Status:**
- Printer status information such as low paper, out of paper, ticket count, unique electronic serial number and system errors are available to the host PC via IEEE-1284, USB or Serial RS-232 reverse channel communications.

**Download Memory:**
- 512 K Flash standard, expandable to 1.5 Megabyte (special order) for storage of user fonts and logos.

**Print Image Memory:**
- 1 or 2 Megabyte depending on configuration.

**Regulatory Compliance:**
- CE Mark: Compliant
- Safety: UL 1950, 3rd Edition
  - CSA C22.2 No. 950-95
  - CENELEC EN 60950: 1999
- CB SCHEME: Compliant. Consult factory for countries listed.
- EMI/EMC: FCC Part 15 Class A
  - CENELEC EN 55022 Class B
  - CENELEC EN 55024: 1998
  - EN 55022 Class B
- HVAC: 1.0 million cuts (minimum) & 1.5 million cuts (typical) & 1.0 million cuts (minimum)

**Storage:**
- -5 to +65°C
- 20-85% relative, non-condensing

**Maintenance:** Modular design for easy component replacement

All specifications subject to change without notice.
**ITX Series**

**Ordering Information** The ITX Product Base Number includes printer with print mechanism and control electronics.

<table>
<thead>
<tr>
<th>Enclosure Type</th>
<th>Dot Resolution</th>
<th>Ticket Width</th>
<th>Firmware</th>
<th>Ticket Separation</th>
<th>Data Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>e = Desktop (with locked internal ticket storage)</td>
<td>2 = 203 dpi 3 = 300 dpi</td>
<td>2 = 2.00” 3 = 3.25” 3A = 2.00” – 3.25” Adjustable 4A = 2.00” – 4.00” Adjustable (eITX is not available in a 4.00” width, at this time) 4AS = 2.00” – 4.00” Adjustable (eITX is not available in a 4.00” width, at this time) (3A, 4A – registration marks are located on bottom left side as viewed from the rear of the printer) Registration marks are compatible with the GTX3004A marks. (4AS – registration marks are located on bottom right side as viewed from the rear of the printer)</td>
<td>Blank = Standard Ticket Firmware (Emulates Standard Ticket Programming Language) G = Windows® (WYSIWYG) Compatible</td>
<td>C = Cutter (pITX = w/Ticket Retainer; µITX, eITX = w/Ticket Ejector) T = Tearbar (only for the pITX and the µITX)</td>
<td>Parallel = IEEE-1284 Parallel Interface Serial = Serial RS232 Interface (Only supported with “Standard” Firmware) USB = USB 2.0 Full Speed Interface</td>
</tr>
<tr>
<td>µ = Desktop (small footprint desktop printer)</td>
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<td>p = Countertop Mount (vertical flush mount)</td>
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</tbody>
</table>

**Example:** pITX 3003-C-Parallel
- p = Countertop Enclosure (Vertical mount ticket printer)
- 3 = 3.25” Ticket Width
- Blank = Standard Ticket Firmware
- ITX = Printer Model Number
- 300 dpi = Dot Resolution
- C = Cutter w/ Ticket Retainer
- Parallel = Parallel Interface

**Additional Accessories**

**ITK Series Power Supply**
- **PS60-14**
  - **Line Cord**
    - Blank = With US approved line cord
    - E = No line cord for export applications

**µITX and µITX Ticket Storage Assembly**
- **GTX-THLP**
  - **Ticket Widths**
    - 2 = Holds up to 2.75” Width (Ticket & Packaging)
    - 4 = Holds up to 4.5” Width (Ticket & Packaging)
      - (Low paper sensor and 6’ auxiliary cable included with either size)

<table>
<thead>
<tr>
<th>Description</th>
<th>Model Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel (IEEE 1284) Interface Cable</td>
<td>ATX-PC36</td>
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<tr>
<td>Serial (9 pin) Interface Cable</td>
<td>ITX-SC09</td>
</tr>
<tr>
<td>USB 2.0 A-B Cable</td>
<td>CUSB-206</td>
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<tr>
<td>ETX Adapter plate</td>
<td>ITX-APETX0</td>
</tr>
<tr>
<td>Power Supply Holder</td>
<td>PS60-H</td>
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</tbody>
</table>

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