Intermec Industrial Printers
Selection Guide
Choosing the Printer That’s Right for You

Whether you’re expanding your existing bar code printer fleet, making a few compliance-driven upgrades, migrating to new technologies, or just getting started with your first automation project, be sure to consider these core criteria when making your decision.

Environment
Do your printers need to withstand being bumped by heavy equipment, scratched by moving bins, jostled by machinery? Is space at a premium? The more demanding your shop floor or warehouse environment, the more important it is to select a printer designed for industrial use and built with rugged metal parts. If space is limited, look for those same qualities in a compact industrial printer.

Volume
An inventory application driving less than 500 labels a day will need a very different printer than a high volume manufacturing floor where thousands of bar code labels are being printed on a continuous basis 24x7. A qualified consultant can help you select the right combination of features for your printer’s intended duty cycle, and ensure your printer is optimized for your specific application.

Mobility
Do your workers need to generate and apply labels in different locations as they move throughout your facility? If so, a wearable or forklift-mountable mobile printer designed for in-premise use may be your best choice. If your operation incorporates movable work cells, consider the benefits of stationary printers with secure wireless connectivity to get flexibility paired with high volume printing.

Management
Will your printers be in one location, or several? The larger and more extensive the installation, the greater the potential load on your IT resources. Printers that can be installed and managed remotely can dramatically reduce downtime and ease the IT workload.

Integration
Is RFID in your future? Do you have a new WMS or ERP system in the works? Or a new wireless infrastructure with updated security standards? Perhaps your operation has a mix of different printer languages to integrate. Many of today’s printers incorporate advanced capabilities that will help you meet these needs from day one. Identify these needs up-front to ensure your choices meet your long-term requirements.

The Big Picture
If your company’s automation needs extend beyond bar code printers and media, look for a supplier that can provide a range of integrated devices such as scanners, mobile computers and RFID. With a single supplier and a family of solutions, you can reduce training and support costs and be assured of seamless integration. Consider also the supplier’s longevity in the industry, partnerships with your local value-added resellers, and dedication to the bar code printing and media market.
Intermec Industrial Printers & Media

A full range of solutions to meet your needs

**PD41 & PD42 Commercial Printers**

The PD41 & PD42 are dependable and versatile printers suitable for medium-duty applications in manufacturing, transportation and warehousing environments. With their all-metal chassis and covers, proven printing mechanics and powerful electronics, they provide a solid level of performance your business can depend upon.

Both products offer Smart Printing™ features and flexible network connectivity options at an affordable price. The PD41’s one-button interface makes the printer easy to operate and well protected against unintentional setup changes.

The PD42’s graphical display saves time by allowing users to set up, configure and fine tune printing parameters without having to send commands through the host.

**PF2i & PF4i Mid-Range Printers**

The PF2i and PF4i printers are specially designed to provide rigorous bar code label printing in areas where space is limited. Users can enjoy all the features and benefits of larger bar code label printers — including stand alone smart printing — without giving up valuable space.

The PF2i prints labels up to 60 mm (2.3 in) wide. The PF4i accommodates labels up to 114.3 mm (4.5 in) wide. Both printers support full size rolls up to 213 mm (8.4 in), reducing the need for media changes. The flexible media handling of the PF2i and PF4i printers supports standard label rolls, tear-off or label auto peel, as well as labels, tickets and tags in either roll or fan-fold format, to meet the specific needs of your application.

**Specifications**

**Typical Volume:** 1000-4000 labels/day

**Print Width (max):** 104 mm (4.09 in)

**Resolution:** 8 dots/mm (203 dpi), 12 dots/mm (300 dpi, option)

**Print Speed (max):** 153 mm/sec (6 ips)

**Size (LxHxW):** 453 x 273 x 270 mm (17.8 x 10.8 x 10.6 in)

**Weight:** 13kg (28.7 lbs)

**Interfaces:** Ethernet, USB, Serial, Parallel

**Memory:** Standard: 4MB Flash, 8MB SDRAM, 1 GB Compact Flash slot

**Optional:** 16MB Flash, 1GB CompactFlash

**RFID:** PF2i: EPC Generation 2 / ISO 18000-6C, ISO 18000-6B; Compliant with IATA/AEA baggage tag specifications including IATA 740, 740c

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**Also available:** The PF2i RFID Printer. This multi-function configuration provides the additional capability to create RFID smart labels to drive RFID applications. With support for frequency-agile RFID tags, the PF2i can simultaneously encode and print labels that can be used worldwide.

**Specifications**

**Typical Volume:** 2000-7000 labels/day

**Print Width (max):** PF2i: 56 mm (2.2 in) PF4i: 105.7 mm (4.16 in)

**Resolution:** PF2i: 8 dots/mm (203 dpi) PF4i: 8 dots/mm (203 dpi); 11.8 dots/mm (300 dpi)

**Print Speed (max):** 200 mm/s (8 ips)

**Size (LxHxW):** PF2i: 397 x 178 x 194 mm (15.6 x 7 x 7.6 in) RFID Big Top: 397 x 205 x 194 mm (15.6 x 8.1 x 7.6 in.) PF4i: 405 x 178 x 244 mm (15.9 x 7.0 x 9.6 in)

**Weight:** PF2i: 5.5 kg (12 lbs) PF4i: 8 kg (17.7 lbs)

**Interfaces:** Ethernet, USB, Serial, Parallel, 802.11b/g

**Memory:** Standard: 4MB Flash, 16MB SDRAM, 1 GB Compact Flash slot

**Optional:** 16MB Flash, 1GB CompactFlash

**RFID:** PF2i: EPC Generation 2 / ISO 18000-6C, ISO 18000-6B; Compliant with IATA/AEA baggage tag specifications including IATA 740, 740c
PM4i Mid-Range Printer

Our most popular mid-range printer, the rugged PM4i is a smart, fast and network-ready industrial printer designed to excel in demanding applications and environments. The PM4i offers advanced, secure network connectivity, including optional integrated Ethernet, and provides five interface ports that can be utilized at once. The PM4i delivers productivity benefits through its superior print speed and throughput, as well as through its wireless flexibility, enabling it to be moved to new locations as demands change.

The PM4i features a rugged metal chassis and durable mechanical design, which provides reliable service in harsh environments, while enabling easy access for routine maintenance, media handling and print-head replacement.

An ideal and easy replacement for the market-leading Intermec 3400 model printer (now discontinued), the PM4i can easily adapt its printer command language so that no changes to current host programming or label formats are required when upgrading.

Also available: The PM4i RFID printer. This multi-function configuration provides the additional capability to create RFID smart labels to drive RFID applications. With support for frequency-agile RFID tags, the PM4i can simultaneously encode and print labels that can be used worldwide.

Migration Path: Ideal replacement printer for the Intermec 3400.

Specifications

Typical Volume: 2000-7000 labels/day
Print Width (max): 105.7 mm (4.16 in)
Resolution: 8 dots/mm (203 dpi); 11.8 dots/mm (300 dpi)
Print Speed (max): 200 mm/s (8 ips)
Size (LxHxW): 543 x 261 x 298 mm (21.38 x 10.28 x 11.73 in)
Weight: 13.5 kg (29.76 lbs)
Interfaces: Ethernet, USB, Serial, Parallel, 802.11b/g
Memory: Standard: 4MB Flash, 16MB SDRAM, 1 GB Compact Flash slot
Optional: 16MB Flash, 1GB CompactFlash
RFID: EPC Generation 2 / ISO 18000-6C, ISO 18000-6B

PX Series High Performance Printers

The sturdy PX4i and PX6i printers deliver outstanding performance. These rugged, metal, high-performance printers are designed to excel in demanding environments and support round-the-clock operations. With print speeds up to 12 inches per second and exceptional print quality, the PX Series printers are ideal for high volume on-demand and compliance labeling applications.

PX printers integrate easily into manufacturing environments and adapt to changing applications. As stand-alone “smart” printers, the PX Series printers can operate production line machinery including scanners, scales, other printers and conveyors as well as access information directly from the network host, eliminating the need for PCs. Their versatile form factor allows them to be mounted in virtually any position, and facilitates add-ons such as an automatic label applicator.

Also available: The PX4i and PX6i RFID printer. This multi-function configuration provides the additional capability to create RFID smart labels to drive RFID applications. With support for frequency-agile RFID tags, this printer can simultaneously encode and print labels that can be used worldwide.

Migration Path: Ideal replacement printer for the Intermec 44x0.

Specifications

Typical Volume: 5,000-10,000+ labels/day
Print Width (max): PX4i: 112 mm (4.4 in)
PX6i: 167.4 mm (6.59 in)
Resolution: 8 dots/mm (203 dpi); 11.8 dots/mm (300 dpi); 16 dots/mm (400 dpi)
Print Speed (max): PX4i: 300 mm/s (12 ips)
PX6i: 225 mm/s (9 ips)
Size (LxHxW): PX4i: 482 x 238 x 275 mm (19.0 x 9.4 x 10.8 in)
PX6i: 482 x 238 x 335 mm (19.0 x 9.4 x 13.2 in)
Weight: PX4i: 12.85 kg (28.4 lbs)
PX6i: 14.80 kg (32.6 lbs)
Interfaces: Ethernet, USB, Serial, Parallel, 802.11b/g
Memory: Standard: 4MB Flash, 16MB SDRAM, 1 GB Compact Flash slot
Optional: 16MB Flash, 1GB CompactFlash
RFID: EPC Generation 2 / ISO 18000-6C, ISO 18000-6B
PB22/32/50 Rugged Mobile Label Printers

Mobile printers are making a significant impact on productivity in the warehouse, by enabling workers to print labels when and where they are needed, and eliminating transit time formerly spent walking to and from fixed printers. By using mobile printers to create labels on-demand, accuracy is also increased as workers are less likely to apply the wrong label.

The rugged PB22/32/50 mobile label printer family delivers on this promise, with ultra fast print speed including the fastest time-to-first-label in the industry, five-foot multiple drop specification, and unique media handling design features that optimize performance. Seamless integration with Intermec computers and other mobile devices ensures easy development, deployment and support, for low total cost of ownership.

Specifications
- Print Width (max):
  - PB22: 55.88mm (2.2 in)
  - PB32: 83.82mm (3.3 in)
  - PB50: 111.5 mm (4.39 in)
- Resolution: 8 dots/mm (203 dpi)
- Print Speed (max): 100 mm/s (4 ips)
- Size (LXHXW):
  - PB22: 101 x 176 x 71 mm (4 x 6.9 x 2.8 in)
  - PB32: 127 x 182 x 81 (5 x 7.2 x 3.2 in)
  - PB50: 160 x 174.5 x 78.8 mm (6.3 x 6.87x 3.1 in)
- Weight with Battery:
  - PB22: 678 g (23.9 oz)
  - PB32: 828 g (29.2 oz)
  - PB50: 1189 g (42 oz)
- Interfaces: RS-232, USB, Bluetooth or 802.11g with WEP, LEAP, WPA/WPA2
- Memory: 16MB RAM, 64MB Flash

Media Supplies

Intermec labels, tags, receipts and ribbons support a broad range of industrial bar code printing applications, and meet the needs of even the most challenging environments.

Intermec Duratherm® direct thermal paper labels are treated with a heat sensitive layer and imaged through direct contact with the print head. Direct thermal products with a top coat provide enhanced durability for applications where high humidity and surface abrasion are a concern.

Intermec Duratran™ thermal transfer labels are available in both paper and synthetic stock. Synthetic or “film” labels meet the needs of more challenging applications, with qualities including tear resistance, aggressive adhesives, moisture and heat resistance. Customers choose these for outdoor applications or harsh manufacturing environments.

Intermec application experts can help you choose the most appropriate in-stock label media, or work with you to develop custom or pre-printed labels that will meet your unique needs.
## Intermec Industrial Printers: Quick Reference

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<th>Commercial Printers</th>
<th>Mid-Range Printers</th>
<th>High Performance Printers</th>
<th>Mobile Printers</th>
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<tbody>
<tr>
<td>Typical Volume</td>
<td>1,000-4,000</td>
<td>2,000-7,000</td>
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<td>(labels/day)</td>
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<td>Intermec Printers</td>
<td>PD41/ PD42</td>
<td>PF2i</td>
<td>PM4i</td>
<td>PXi4 /PX6i</td>
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<td>16MB RAM, 64MB Flash</td>
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<td>Memory, Optional</td>
<td>16MB Flash, 1GB CompactFlash</td>
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<td>28.4 / 32.6</td>
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<td>23.9 / 29.2 / 42 oz with battery</td>
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<td>Size, LxHxW (in)</td>
<td>17.8 x 10.8 x 10.6</td>
<td>15.6 x 7 x 7.6 RFID: 15.6 x 8.1 x 7.6</td>
<td>15.9 x 7 x 9.6</td>
<td>21.4 x 10.3 x 11.7</td>
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<td>19 x 9.4 x 10.8 / 19 x 9.5 x 13.2</td>
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<td>4 x 6.9 x 2.8 / 5 x 7.2 x 3.2 / 6.3 x 6.9 x 3.1</td>
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</table>

### Media Specifications

| Label Roll Core ID (in) | 1.5 or 3     | 1.5 or 3     | 1.5 or 3     | 1.5 or 3     | 1.5 or 3     | 0.75 |
| Max Label Roll OD (in)  | 8.38         | 8.38         | 8.38         | 8.38         | 8.38         | 2.25 / 2.65 / 2.65 |
| Std Ribbon Length (in)  | 18,000       | 18,000       | 18,000       | 18,000       | 18,000       |     |
| Ribbon Core ID (in)     | 1            | 1            | 1            | 1            | 1            |     |
| Ribbon Orientation      | CSI, CSO     | CSI, CSO     | CSI, CSO     | CSI, CSO     | CSI, CSO     |     |
Depend on Intermec Industrial Printers & Media

Intermec industrial printers combine the rugged dependability that is essential in harsh environments with the advanced capabilities that can help improve productivity, drive down total cost of ownership, and ready your operations for tomorrow.

Advanced features such as secure wireless connectivity, the latest communications options and RFID readiness as well as support for multiple interfaces, printer languages and configurations give your Intermec printer the flexibility to meet both current and future requirements.

Designed for ease-of-use, Intermec printers are intuitive to operate and provide easy access to routine maintenance functions such as changing label rolls or replacing printheads. Our thermal transfer printers feature a unique double-clutch mechanism that accepts ribbons wound in either direction, simplifying installation. These features enable users to easily manage these kinds of maintenance tasks directly, reducing the load on IT resources and minimizing equipment downtime.

Intermec SmartSystems® remote management software takes ease-of-use one step further. The SmartSystems foundation provides a single, integrated environment for deploying and managing Intermec printers and other devices located anywhere in the enterprise, on site or around the world. Using the SmartSystems console, administrators can change device settings, update firmware, identify the need for consumables, check battery voltages and execute other changes, allowing them to maintain a high level of printer performance.

Smart Printing™ capabilities enable Intermec industrial printers to operate as smart clients executing user-defined programs that improve efficiency and accuracy. “Smart printers” can operate additional hardware (scanners, other printers, conveyors), provide dynamic data feedback from the network host, and change as needed with the application, eliminating the need for a PC. Custom applications leveraging Intermec FingerPrint™ programming language can also be developed, providing error-proofing and workflow routing capabilities that preserve productivity without requiring worker intervention. Intermec smart printers feature Automatic Bar Code Adjustment, which allows the printer to automatically re-adjust the bar code position so a readable label can be produced, even as the printhead is failing.

Intermec Printers and Media are optimized to work better together, and our application engineers test and qualify media to support your specific application, environment and workflow. Customers who consolidate their fixed printer and media purchases with Intermec and meet minimum volume requirements can also take advantage of the free Printhead Replacement Program*, lowering their total cost of ownership and increasing return on their printing solution investment.

* Program applicable only to fixed printers. Conditions apply. See www.intermec.com
The Intermec Total Solution Advantage

Intermec has 40 years of experience building solutions for demanding environments, and is committed to meeting the bar code printing needs of our customers on a global scale. With hundreds of thousands of printers installed worldwide, we have built a strong foundation of satisfied customers whose manufacturing and warehousing operations depend on Intermec solutions.

Intermec industrial printing and media solutions are complemented by a complete line of solutions and services for your supply chain, including:

- Mobile computers
- Mobile and fixed RFID systems
- Mobile and fixed printers
- Custom, pre-print and stocked media
- Scanning technology
- Professional & support services
- Wireless networks
- Software tools and utilities

Our products and services are used by customers in many industries worldwide to improve productivity, quality and responsiveness of their business operations.

Aligned with Technology Leaders
Intermec does more than design and build the industry’s most complete lineup of rugged, reliable and versatile equipment. We also work with you to understand your unique situation and then leverage our strong relationships with industry-leading partners including Cisco, SAP, Oracle, and Microsoft to help you create a total solution that harmonizes with your networks, platforms and processes.

Supported Globally, Locally
Our network of authorized Intermec Printer Service Partners can provide peace of mind that your mission-critical operations will stay up and running when you need them most. In addition to localized support, Intermec offers online access to manuals, downloads and 24-hour help from our online Knowledge Central database.

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