



IBM SurePOS Family



*Fast, dependable, simple  
point-of-sale printers*



**IBM SureMark Printers**

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IBM SureMark Printer Model TF6 / TF7

## **Highlights**

### **Powerful performance**

IBM SureMark™ Printers can print up to 6.5 inches per second, delivering up to 52 lines per second (lps) for Single Byte Character Set (SBCS) output and up to 50 lps for Double Byte Character Set (DBCS) output. They are available in single-station thermal models, or two-station models with impact slip printing for multipart forms and checks. All models support color thermal paper printing.

### **Engineered for retail**

SureMark Printers use durable hardware and printing mechanisms designed by IBM for superior reliability. Their footprints are among the smallest available, and single-station models offer flexible mounting options to fit wherever you need them. Paper handling is quick and simple.

### **Investment protection**

SureMark Printers support USB and RS-485/RS-232 connections. Modular interface adapters allow you to choose the best interface today, then upgrade when the time is right. USB offers hot plug/unplug capabilities, plus automatic loading of system configurations and device drivers.

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*Quick, reliable printing plus powerful marketing capabilities*

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### **High-powered POS performance**

These quiet, high-quality thermal receipt printers set a new standard for speed, delivering up to 52 lps for SBCS output and up to 50 lps for DBCS printing. They help retailers to complete transactions more quickly, as well as print logos, coupons and marketing messages on receipts – in black plus an accent color – turning the POS printer into a valuable marketing tool. Logo and barcode data stored in flash memory can minimize print time. For retailers who need additional memory for failsafe journal storage, an optional 2MB or 8MB is available for some models via a request for price quotation (RPQ).

### **Proportional and scalable fonts**

SureMark Printers are available today with TrueType font support – or “newspaper style” printing. This increases readability dramatically, and creates a host of opportunities for printing longer, more engaging customer messages on receipts. With scalable fonts, characters can be printed up to eight times their standard size for a bold, unforgettable look.

### **Color thermal printing**

Customers remember messages printed in color far better than those printed only in black. That is why all SureMark Printers allow you to print on thermal papers that provide one additional accent color, such as red or blue (with a firmware upgrade at no additional charge). Use the accent color to highlight promotional messages, total savings, loyalty points and other special information.

### **Single-pass check handling**

Model T14 can perform single-pass check handling in as little as 14 seconds with a single printhead, unlike other devices that use multiple printheads and ribbons to process the check. Conventional MICR reading, check endorsing and printing are available as well. For check handling without MICR reading or check flipping, choose Model T13 or T15.

### **One global solution**

International and global retailers can use SureMark Printers as a single worldwide printer platform to improve service and support efficiency. These printers are available in a wide range of models, so multinational retailers can select the right model for each geography in which they do business. Application interfaces are similar for all models, so retailers can easily upgrade installed printers with the latest functions, such as color thermal paper printing or PDF-417 barcodes.



**Compact, easy-to-use design**

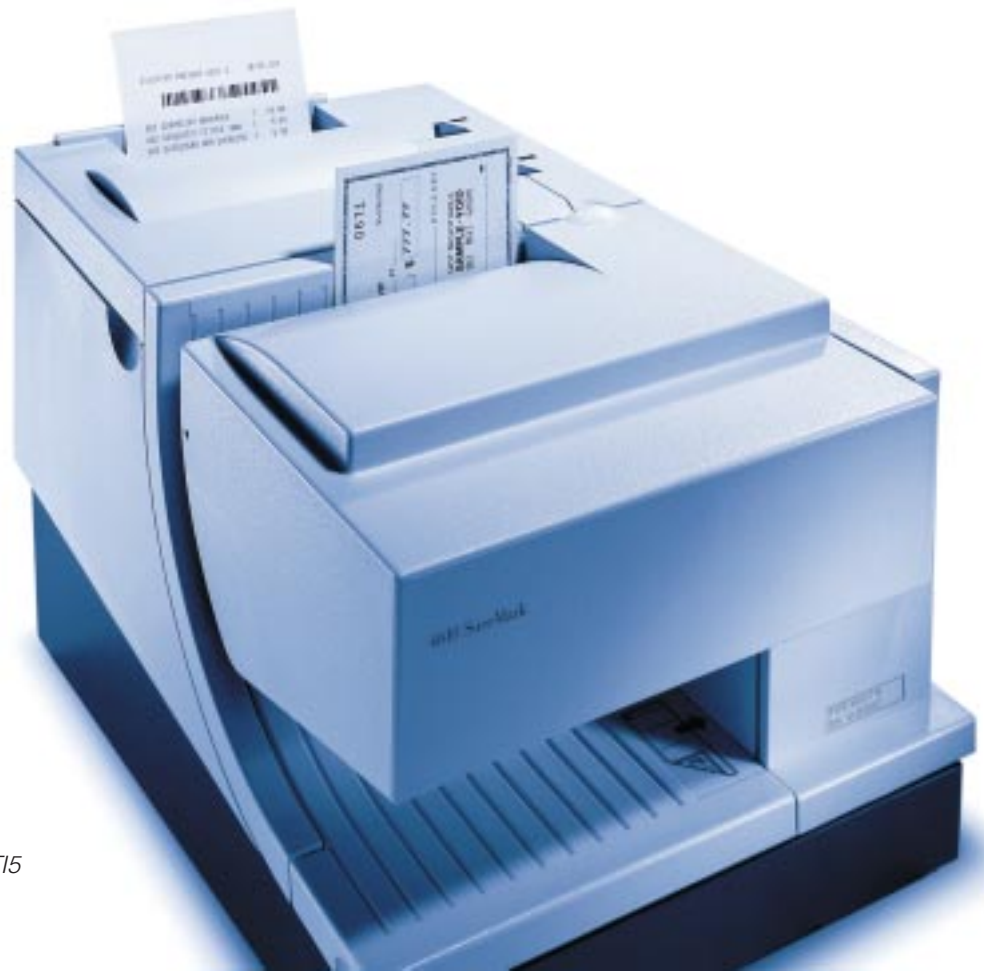
With some of the smallest footprints in their class, SureMark Printers give you maximum counter space. Single-station models offer wall-mounting with upside-down printing, so receipts stay right-side up as they exit wall-mounted printers. Simple paper handling makes refills quick and easy. For some models, 90mm-diameter paper rolls are available to minimize paper reloading.

**Flexible options to protect your investment**

SureMark Printers work with a variety of POS hardware, including many non-IBM systems. They support USB and RS-485/RS-232 via modular adapters, so you can easily upgrade these printers if your hardware configuration changes. Select the interface that best supports your current hardware investment, then migrate to new platforms – such as the IBM SurePOS™ 700 Series, with USB connectivity – at your own pace.

Models TM6 and TF6 offer transparent emulation for Epson® TM-T88II printers, which makes porting applications easy. These models provide emulation for the receipt station of IBM Model 3/Model 4 Printers, while Models TI3, TI4 and TI5 provide emulation for both the receipt and document insert stations.

Customers in Asia Pacific can use existing applications with Models TI5, TM7 or TF7 in SBCS mode and migrate to a DBCS application. These models allow retailers to switch between DBCS mode and SBCS mode electronically, with no mechanical adjustments. In SBCS mode, Model TI5 operates like Model TI3, while Models TM7 and TF7 operate like Models TM6 and TF6, respectively.



*IBM SureMark Printer Model TI3 / TI4 / TI5*

## IBM SureMark Printers at a glance

Model	TI3	TI4	TI5	TM6	TM7	TF6	TF7
<b>Speed</b>							
<i>Thermal receipt station</i>	<ul style="list-style-type: none"> <li>• 52 lps at 8 lines per inch</li> <li>• 39 lps at 6 lines per inch</li> </ul>	<ul style="list-style-type: none"> <li>• 52 lps at 8 lines per inch</li> <li>• 39 lps at 6 lines per inch</li> </ul>	<ul style="list-style-type: none"> <li>• 52 lps at 8 lines per inch (SBCS)</li> <li>• 39 lps at 6 lines per inch</li> <li>• 50 lps at 7.7 lines per inch (DBCS)</li> <li>• 6.5 inches per second</li> </ul>	<ul style="list-style-type: none"> <li>• 52 lps at 8 lines per inch</li> <li>• 39 lps at 6 lines per inch</li> </ul>	<ul style="list-style-type: none"> <li>• 52 lps at 8 lines per inch (SBCS)</li> <li>• 39 lps at 6 lines per inch</li> <li>• 50 lps at 7.7 lines per inch (DBCS)</li> <li>• 6.5 inches per second</li> </ul>	<ul style="list-style-type: none"> <li>• 52 lps at 8 lines per inch</li> <li>• 39 lps at 6 lines per inch</li> </ul>	<ul style="list-style-type: none"> <li>• 52 lps at 8 lines per inch (SBCS)</li> <li>• 39 lps at 6 lines per inch</li> <li>• 50 lps at 7.7 lines per inch (DBCS)</li> <li>• 6.5 inches per second</li> </ul>
<i>Impact slip station</i>	<ul style="list-style-type: none"> <li>• 4.3 lps</li> </ul>	<ul style="list-style-type: none"> <li>• 4.3 lps</li> </ul>	<ul style="list-style-type: none"> <li>• 4.3 lps (SBCS and Hanguel)</li> <li>• 2.2 lps (Traditional and Simplified Chinese, Katakana and Kanji)</li> </ul>	–	–	–	–
<b>Memory Usage</b>							
<i>16KB data buffer RAM</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Microcode (can be updated by user)</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>256KB flash memory accessible to user for storage of fixed messages, logos and graphics, additional code pages, and electronic journal or other user data storage</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Optional 2MB flash memory for temporary storage of electronic journal data (RPQ)</i>	Yes	Yes	No	No*	Yes*	No*	Yes*
<i>Optional 8MB flash memory for temporary storage of electronic journal data (RPQ)</i>	Yes	Yes	No	No*	Yes*	No*	Yes*
<i>1.6MB flash memory for storage of DBCS characters</i>	–	–	Yes	–	Yes	–	Yes
<b>Euro-ready</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes

\* If you need more than 104KB for offline storage and are printing in SBCS mode, please order Model TM7 or TF7 with 2 or 8MB RPQ.

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**IBM SureMark Printers at a glance (continued)**

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**Character Sets**

*Code Pages (SBCS)* 437 (U.S.), 858 (International), 860 (Portuguese), 863 (Canadian French), 865 (Norwegian)

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*Code Pages (DBCS)\** 932 (Japanese), 950 (Traditional Chinese), 1381 (Simplified Chinese), 949 (Hanguel)

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*User-Specified SBCS Code Pages*

- Models TI3 and TI4: 4 additional thermal, or 2 proportional, and 2 additional impact code pages
- Model TI5: 3 additional thermal, or 1 proportional, and 1 additional impact code pages (Model TI5)
- Models TF6 and TM6: 4 additional thermal, or 2 proportional
- Models TF7 and TM7: 3 additional thermal, or 1 proportional

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**Resident Barcode Formats** UPC A/E, EAN 8, EAN 13, JAN 8, JAN 13, Code 39, ITF, Code 93, Code 128, Codabar, PDF 417

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**Dimensions**

- Models TI3, TI4 and TI5: 190.5 mm W (200.5 mm W with overhanging ledge) x 255 mm D x 144 mm H front, 190 mm H back (7.5 in. W [7.89 in. W with overhanging ledge] x 10 in. D x 5.5 in. H front, 7.5 in. H back)
- Models TF6, TM6, TF7 and TM7: 145 mm W x 177 mm D at counter (196 mm D projected) x 95mm H at front (121.5 mm H at rear)

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**Weight**

- Models TI3 and TI5: 4.4 kg (9.6 lbs)
- Model TI4: 4.8 kg (10.5 lbs)
- Models TM6, TM7, TF6 and TF7: 1.4 kg (3 lbs)

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**Interfaces**

*USB*

- For attachment to the IBM SurePOS 700 Series (no separate power supply required)
- For attachment to PCs and other POS vendors' terminals (power supply required, see optional features)

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*RS-485*

- For attachment to IBM 4683, 4693 and 4694 POS terminals
- Separate power supply not required
- Both SBCS and DBCS 4694 models supported in Model TI5 and Model TM7

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*RS-232*

- For attachment to the IBM 4614 SureOne™ POS terminal, IBM SurePOS 500 Series, IBM 4695 POS terminals, PCs or other POS vendors' terminals
- DTR/DSR or XON/XOFF communications mode
- 9-pin D-shell connector at 9.6 Kbaud or 19.2 Kbaud
- Power supply required (see optional features)

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\* All character sets can be downloaded using a utility available from the IBM Retail Store Solutions Web site at [www.ibm.com/industries/retail/store](http://www.ibm.com/industries/retail/store). Not all four code pages may be resident simultaneously.

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**IBM SureMark Printers at a glance (continued)**

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**Printing characteristics**

*Thermal print resolution*      8 dots per mm (203 dots per in.)

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- Font A (SBCS)*
- 15 or 17 characters per inch
  - Receipt: 10x20 dot characters, 44 or 48 characters per line on 80 mm (3.15 in.) paper
  - Slip: 7x9 dot characters, 47 or 52 characters per line on inserted documents
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- Font B (SBCS)*
- 12 characters per inch
  - Receipt: 12x24 dot characters, 34 characters per line on 80 mm (3.15 in.) paper
  - Slip: 7x9 dot characters, 37 characters per line on inserted documents
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- Font C (SBCS)*
- 20 characters per inch
  - Receipt: 8x16 dot characters, 57 characters per line
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- DBCS characters (T15, TF7, TM7)*
- Thermal: 24x24 dot characters at 19 characters per line (all languages)
  - Impact (Hanguel): 9x16 dot characters at 21 characters per line
  - Impact (Traditional and Simplified Chinese, Katakana and Kanji): 16x16 dot characters at 12 characters per line
- 

- Additional choices for receipt*
- Color printing (black plus one accent color on thermal papers that support two-color printing)
  - TrueType fonts
  - Upside-down printing
  - Scalable fonts (all fonts scalable up to 8X wide and 8X high)
  - Underscore/overscore
  - Reverse image
  - 90° rotation of characters
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- Additional choices for slip*
- Portrait or landscape
  - Double wide and/or double high characters
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*IBM SureMark Printer Model TM6 / TM7 integrated with  
IBM SurePOS 750*



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**IBM SureMark Printers at a glance (continued)**

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- Special features (T14 only)**
- MICR: Reads E13B and CMC7 fonts; Auto Switch feature detects which format is being used and decodes accordingly
  - Check-handling: Under program control MICR is read and sent to POS, check is franked, flipped over and printed on face
  - Flipped documents dimensions: 66mm to 101mm width (2.6 in. to 4.0 in.), 80mm to 223mm length (3.14 in. to 8.8 in.)
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- Optional features**
- Powered USB and RS-485 cables for attachment to select IBM POS systems
  - Standard USB and RS-232 cables for attachment to PCs, IBM POS systems and other manufacturers' POS systems
  - Universal power supply for use with USB and RS-232 attachment
- 

- Additional standard features**
- Cutter
  - Tear bar (single-station models)
  - Receipt out-of-paper sensor
  - Top and bottom document sensors (dual-station models)
  - Cash drawer port (supports two +24V cash drawers)
  - Cash drawer uses a standard RJ11 connector
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**Supply specifications**

*Thermal paper*

- POS grade (May be recycled with other paper products. For a list of approved papers, go to [www.ibm.com/industries/retail/store](http://www.ibm.com/industries/retail/store), then click to the support section for SureMark Printers.)  
Note: Printer reliability and performance are directly related to quality of supplies. Specifications for IBM SureMark Printers are established using supplies that meet IBM standards. Thermal paper with post-processing (including, but not limited to, watermarks, coupons, or advertisements printed on the front or back) is not covered by IBM specifications. Some inks and printing processes will work while others may not. Printer problems caused by supplies may result in a billable service call, regardless of the existence of a service contract.
  - Width: 80 mm (3.15 in.)
  - Diameter of roll: 80 mm (3.15 in.) for T1 models, up to 90 mm for Models TM6, TM7, TF6 and TM7
  - Optional external mounting for larger paper roll is available for single-station printers (RPQ)
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*Ribbon*

- Epson ERC35 or equivalent (black or purple)
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*Forms*

- Single and multipart forms
  - Original and two or more clear copies, depending on form thickness
  - Minimum width 66 mm (2.6 in.); minimum length 80 mm (3.15 in.)
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**IBM SureMark Printers at a glance (continued)**

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**Operating systems (Models T13, T14, T15)\***

*USB or powered*

Drivers are available for:

*USB connection*

- IBM 4690 Operating System
  - 4690 OS V2 R3 (which includes JavaPOS™ 1.4) for Models T13, T14 and T15 (in SBCS mode)
  - 4690 OS V2 for Model T15 (in DBCS mode) when available
  - 4690 OS V1 DBCS support will be offered via services agreements
- Windows® 2000 Professional with:
  - Point-of-Sale Subsystem for Windows support from Point-of-Sale Subsystem V1.1 or later
  - OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.2 or later
- Windows 98 Second Edition or Microsoft® Windows NT® 4.0 with:
  - POSS/Win, OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.0 or later

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*RS-485 connection*

Drivers are available for:

- IBM 4690 Operating System
  - 4690 OS V1 at level 9910, 4690 OS V2 R2, or 4690 OS V2 R3 (which includes JavaPOS 1.4) for Models T13, T14 and T15 (in SBCS mode)
  - 4690 OS V2 for Model T15 (in DBCS mode) when available
  - 4690 OS V1 DBCS support will be offered via services agreements
- IBM PC DOS 2000 with Point-of-Sale Subsystem for DOS V1.6.0 + delta package 160(D) or later
- Windows 2000 Professional with:
  - Point-of-Sale Subsystem for Windows support from Point-of-Sale Subsystem Suite V1.1 or later
  - OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.2 or later
- Windows 98 Second Edition or Windows NT 4.0 with:
  - POSS/Win, OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.0 or later

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*RS-232 connection*

No driver is required for native mode RS-232 attachment

- Windows 2000 Professional with:
  - OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.2 or later
- Windows 98 Second Edition or Microsoft Windows NT 4.0 with:
  - OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.0 or later

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**IBM application support with 4690 OS or Windows NT (Models T13 and T14)\*\***

- StoreFlow Release 1.4 (where available)
- SurePOS ACE
- Chain Drug Sales Application with SureMark Printer support (PRPQ 5799-QYP)
- 4680-4690 Supermarket Application with SureMark Printer support (PRPQ 5799-QYL)
- 4680-4690 General Sales Application with SureMark Printer support (PRPQ 5799-QYN)
- Electronic Journal function for above applications (PRPQ 5799-QXL)

Note: 4690 Terminal Services for Windows NT is required when using Windows NT 4.0 or Windows 2000 (when support is available) as the primary operating system with the 4690 applications listed above

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\* Some printer functions may not be supported by all operating systems.

\*\* For minimum application requirements, refer to the 4610 SureMark Printers PRPQ documentation.

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**IBM SureMark Printers at a glance (continued)**

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**Operating systems (Models TM6, TM7, TF6, TF7)\***

*USB or powered*

Drivers are available for:

*USB connection*

- 4690 OS V2R4 for both SBCS and DBCS print modes when available.

*(available on*

- Windows 2000 Professional with:

– Point-of-Sale Subsystem for Windows support from Point-of-Sale Subsystem Suite V1.3.0 or later

– OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.3.1 when available or later

*Models TM6*

- Windows 98 Second Edition or Windows NT 4.0 with:

– Point-of-Sale Subsystem for Windows support from Point-of-Sale Subsystem Suite V1.3.0 or later

– OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.3.1 when available or later

*and TM7 only)*

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*RS-485 connection*

Drivers are available for:

- 4690 OS V2R4 for both SBCS and DBCS print modes when available

- IBM PC DOS 2000 with Point-of-Sale Subsystem for DOS V2.1.0 or later for Models TM6, TM7

- Windows 2000 Professional with:

– Point-of-Sale Subsystem for Windows support from Point-of-Sale Subsystem Suite V1.3.0 or later

– OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.3.1 when available or later

- Windows 98 Second Edition or Windows NT 4.0 with:

– Point-of-Sale Subsystem for Windows support from Point-of-Sale Subsystem Suite V1.3.0 or later

– OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.3.1 when available or later

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*RS-232 connection*

No driver is required for native mode RS-232 attachment

- Windows 2000 Professional with:

– OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.3.1 when available or later

- Windows 98 Second Edition or Microsoft Windows NT 4.0 with:

– OPOS and JavaPOS support from Point-of-Sale Subsystem Suite V1.3.1 when available or later

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**Limited Warranty<sup>1</sup>**

1 year

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\* Some printer functions may not be supported by all operating systems.



### For more information

To learn more about IBM SureMark Printers or other IBM POS solutions, contact your local IBM representative or find us on the Web at [www.ibm.com/industries/retail/store](http://www.ibm.com/industries/retail/store)

To place an order, call 1 800 IBM-CALL (1 800 426-2255) or 1 770 863-1000 outside the U.S. and Canada.

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Printed on recycled paper containing 10% recovered post-consumer fiber.

*Front cover shows an IBM SureMark Printer Model TM6 / TM7.*