

IBM SureMark printers shrink costs, provide ultimate operational efficiency and set the standard for 'green' retailing



## IBM SureMark Printer

### Single-station model 1NR (1NA, 1ND)



IBM SureMark single-station printers 1NR in pearl and iron gray

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#### Highlights

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- **Fastest IBM receipt printer ever – 80 LPS – 27 percent faster than top competitor**
- **Easy to manage with IBM exclusive Remote Management Agent (RMA)**
- **Accurate, programmable sensor system monitors printer 'health'**
- **Reduces paper changes by 46 percent with support for four-inch (102 mm) rolls**
- **Eco-friendly packaging and receipt media**
- **Resists spillage – channels liquids away from critical components**
- **Flexible mounting options include wall mounting with upside down printing**
- **Simplifies ordering and inventory management with streamlined model structure.**

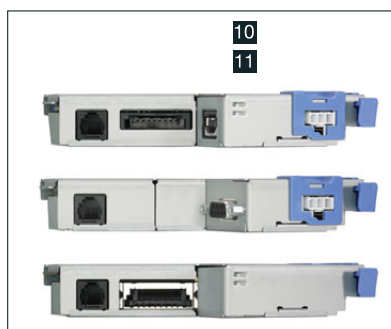
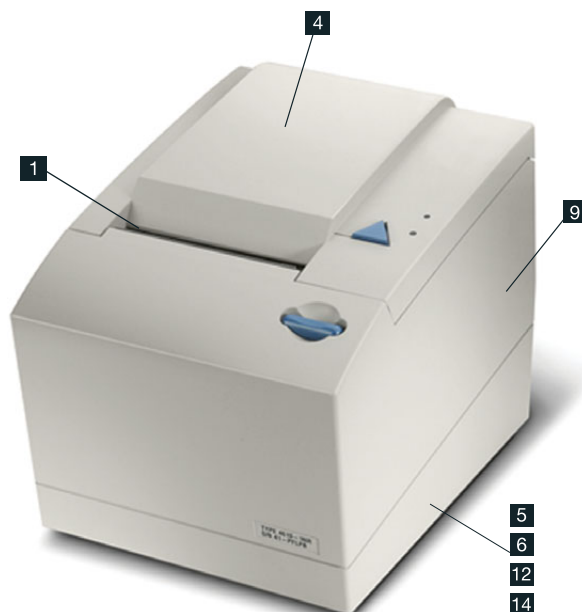
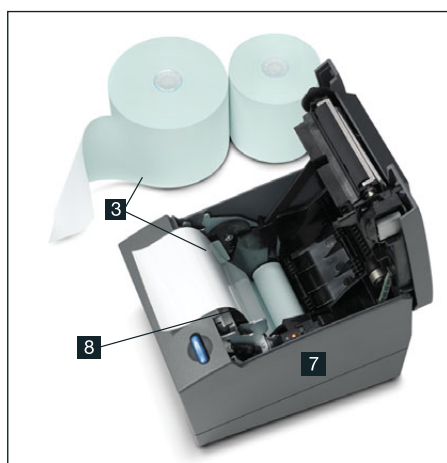
#### The world's premier retail printer

Retailers realise now is the time to drive transformation and make their operations smarter and more competitive. Those who invest in technology that can shrink costs while providing operational efficiencies and integrating 'green' principles into their business will be positioned for the future.

For these retailers, IBM introduces new models of the IBM SureMark single-station printer. Built for ultimate retail-hardened performance in demanding environments, the IBM SureMark printer delivers unmatched speed and reliability and is easy to manage and service; plus it offers earth-friendly design and packaging that set new world standards.

**IBM SureMark printers  
boost operational  
efficiency and cut costs**

## A new world standard for retail receipt printers



1. Fast 80 Lines per second (LPS) receipt printing for single-byte (SBCS) or double-byte (DBCS) printing
2. Push button receipt cover opening
3. Easy drop-in paper loading and large four-inch (102 mm) receipt roll helps reduce downtime and training expenses
4. Retail-hardened, spill-resistant design delivers high reliability in the harshest retail environments
5. Extended code page support (27 total) enables worldwide use
6. 3 MB user flash memory supports barcodes, logos, colour graphics and TrueType fonts
7. A programmable audible alarm can be used to prompt users
8. Paper motion sensor detects jams and reduces waste of receipt media. Paper low sensor is accurate and programmable, reducing labour expenses. Print head and cutter health sensors minimise downtime
9. All IBM peripherals are tested, engineered, colour coordinated, provide latching connections, are compatible and optimised to work as a total store solution
10. Powered universal serial bus (USB) and RS-485 connectivity eliminates the need for a separate power brick and conserves counter space
11. Standard USB and RS-232 connectivity integrates with IBM and third-party point of sale (POS) systems (external power brick or special cable required)
12. Epson Emulation and Compatibility Modes ease transition to new models and enable easy replacement of competitive printers
13. All packaging materials are recyclable and most are made from recycled post-consumer waste
14. An optional wall mounting bracket can be used to save valuable counter space

## A new world standard for retail receipt printers

### **Fast printing wins customers and improves productivity**

New IBM SureMark printers are specifically designed to meet the rigors of retail environments and feature the most advanced printer technologies today to speed transactions. With a record 80 LPS<sup>1</sup> for SBCS or DBCS, these faster printers process transactions 27 percent quicker than the top competitor to improve customer satisfaction and employee productivity. IBM innovations, such as standard 3 MB<sup>2</sup> flash memory, help retailers print 'value added' messages on receipts while keeping checkout lanes moving.

### **Remote management reduces Total Cost of Ownership (TCO)**

IBM SureMark single-station printers lower operating costs and TCO with easy-to-manage features including IBM Retail Systems Management tools.

RMA and IBM Director software, provided at no additional cost, keep your business running smoothly by providing critical maintenance and environmental information. Business IT costs are reduced by managing your POS, peripherals and application locally or from a remote site.

### **Unique features mean fewer service calls and less downtime**

IBM SureMark printers are designed with a built-in sensor system that continuously monitors the printer's 'health.' A paper motion sensor detects jams and reduces waste of receipt media. Print head and cutter sensors minimise downtime by identifying parts that are about to fail so they can be replaced proactively. Additionally, easy drop-in paper loading and a large four-inch (102 mm) receipt roll reduce

downtime and training expenses. Retailers can save up to five minutes per media roll change by using the paper low prompt to initiate roll changes. When linked with RMA software, store managers can be automatically paged when a printer paper low sensor is tripped, ensuring that the manager will bring a new receipt roll to the cashier without interrupting transactions.

### **Cost cutting design and performance deliver quick Return On Investment (ROI)**

Operating costs are significantly reduced due to the easy-to-service design of IBM SureMark printers. Key printer components like thermal print head and cards can be replaced by trained personnel instead of costly service technicians. Covers are easily removed and replaced, helping to reduce costs through better inventory management and accommodating POS

## A new world standard for retail receipt printers



*Newly designed packaging includes HDPE inserts made from recycled post-consumer waste, saving space for energy and cost-efficient shipping and disposal. Box and inserts are 100 percent recyclable*

and peripherals colour changes. Snap-in interface adapters, USB, RS-232 and RS-485 make migration to new system platforms easier and cost effective. Usage statistics are not only available locally but can be acted upon remotely by RMA and can be used to extend printer life with proactive servicing and wear leveling to minimise downtime. Fewer service trips translate into savings in travel and valuable employee time and less impact on the environment.

### **Supremely Green! Saving the environment and your bottom line!**

IBM sets new world standards in eco-friendly POS technology with new SureMark single-station printers. Extending the IBM commitment to environmental stewardship, IBM SureMark printers are the first designed to use polymer film, an emerging advanced receipt media that is fully recyclable. The new receipt material has multiple layers of polymer film for strength and opacity but is much thinner than standard paper media. Each roll is 19 percent longer than a paper roll, meaning less

environmental impact, fewer roll changes and less printer and employee downtime. In fact, using an IBM SureMark printer with polymer receipts on a larger roll reduces environmental waste and TCO significantly more than printers with two sided receipt media (2ST).

### **Minimum impact at end of life reduces costs and waste**

IBM SureMark printer packaging is 100 percent recyclable, including box and inserts. The high-density polyethylene (HDPE) inserts are made from recycled post-consumer waste and can be stacked in very little space, reducing transportation and packaging disposal costs. Printer plastics and metal parts are also recyclable, minimising the environmental impact of disposal when the product reaches end of life. For environmentally conscious recycling and disposal options, IBM Asset Recovery Solutions<sup>3</sup> offers a fully compliant, enterprise-wide asset disposal program.

# A new world standard for retail receipt printers

## Retail-hardened for lasting performance in harsh environments

Constructed from the highest quality materials available, IBM SureMark printers are retail-hardened and spill-resistant to deliver high reliability in the harshest retail or food service environments. A marketing life of up to five years and a service life of seven years or more mean your investment is protected and lifecycle costs are optimised, reducing TCO.

## Use a single printing platform worldwide across your enterprise

A single IBM SureMark printer model can support the unique needs of retailers in many countries. An extended code page supports global use and

compatibility with leading industry and legacy systems and helps protect technology investments. Designed with open platform technology, the IBM SureMark printer enables use of a single POS printing platform across the enterprise.

## Low cost financing from IBM, the industry leader in POS solutions

Now more than ever, retailers depend on IBM for POS solutions that boost operational efficiency, shrink costs and provide quick ROI. IBM is committed to meeting the challenges of this demanding retail environment by offering an array of low cost financing and leasing options. With products

developed by IBM engineers with over 100 years combined experience in the POS printing field, and service provided by IBM and our highly skilled IBM Business Partners, it's no wonder the world's top retailers use IBM POS printer solutions.

## For more information

To learn more about IBM SureMark single-station printers and other retail store solutions from IBM, please contact your local IBM representative or visit: [ibm.com/products/retail](http://ibm.com/products/retail).

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

Model	Availability	Character Set	Single-Pass Check Handling	Cover Colour	Warranty Service <sup>4</sup>
1NR	Worldwide	SBCS and DBCS	No	Pearl White or Iron Gray	IBM on-site repair <sup>5</sup>
1NA	US only	SBCS and DBCS	No	Pearl White or Iron Gray	IBM advance exchange
1ND	UK only	SBCS and DBCS	No	Pearl White or Iron Gray	IBM Depot service

## A new world standard for retail receipt printers

### IBM SureMark Printer at a glance

Models	1NR
Receipt station (one-colour paper)	80 lps @ 8 lines per inch (lpi), 60 lps @ 6 lpi
Receipt station (two-colour paper)	35 lps @ 8 lpi, 26 lps @ 6 lpi
Printing resolution (thermal)	203 dots per inch (dpi)
Data buffer Random Access Memory (RAM)	Dynamic/expandable
Flash memory for microcode	5 MB
Flash memory for offline journal	Up to 3 MB
Flash memory for logos	Up to 3 MB
Flash memory for fixed messages	Up to 3 MB
Flash memory for code pages	Up to 3 MB
Flash memory for user characters	64 KB
Interfaces	RS232 – 115 kilobits per second (kbps) (external power brick or special power cable required) RS485 – 187 kbps (24 or 38 Volt) USB 2.0 – 12 MegaBytes per second (Mbps) (Full Speed – Bulk and HID) Powered USB plus Standard USB
Ports	<ul style="list-style-type: none"> <li>• DC In (except RS485)</li> <li>• USB/Powered USB or RS232 or RS485 (24 or 38 V) (Interface card dependent)</li> <li>• OEM Cash Drawer (+24 V)</li> </ul>
Customer Replaceable Units (CRUs) with Light-Path management	n/a
Sensors	Paper low, paper out, cutter health, print head health, usage counters, paper motion jam detection
Mounting options	Integrated (Integration tray), Distributed (free standing), Wall mount
Support for wide range of receipt media – thickness/type of media <sup>6</sup>	1.6 - 3.7 mil (thousandths of an inch) paper thickness. Factory feature selection of 2.28 in (58 mm) or 3.15 in (80 mm) paper width
Media type supported/roll diameter	Receipt paper rolls – maximum 4 in (102 mm) diameter. External roll (mounted under counter) maximum roll diameter – 12 in (305 mm)
Energy consumption efficiency*	N/A
'Green' attributes	Shipping container and inserts are made of recycled materials and are stackable and recyclable

## A new world standard for retail receipt printers

### IBM SureMark Printer at a glance

Dimensions (WxDxH)	Width: 5.7 in (145 mm) Depth: 7.0 in (177 mm) Height cover closed: 6.3 in (159 mm) Height cover opened: 10.2 in (260 mm)
Weight	Model 1NR: 3.5 lb (1.4 Kg)
Command Sets	Native, Epson ESC POS Emulation <sup>7</sup> , Compatibility Mode <sup>8</sup>
Operating system support <sup>9</sup>	NLPOS 9 SSP3+/IRES 2.1.5 CSD 4690 OS V6R1 Microsoft® Windows Vista® SP1, XP SP3, WEPOS Update 1.1, POSReady 2009, 2003 Server DOS
Drivers supported <sup>9</sup>	UPOS 1.12 4610 Native Windows 2.5 4690 OS V6 R1
IBM application support – ACE, SA, GSA, CSA	IBM applications are tested in compatibility mode only
Resident barcode formats	UPC A/E, JAN 8(EAN), Code 39, ITF, Code 93, Code 128 a, b, and c, Codabar, PDF417
Integration kits	SurePOS 700 and 500 Series
Reliability	150 km – thermal print head life. 1.5 million cuts – cutter life
North America	Models 1NR and 1NA (US only)
Latin America	Model 1NR
Europe, Middle East, Africa	Models 1NR and 1ND (UK only)
Asia Pacific	Model 1NR

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<sup>1</sup> Indicates rated speed. Actual print speed depends on user-specific configuration of interface, application, operating system and drivers.

<sup>2</sup> MB equals one million bytes when referring to storage capacity; accessibility may be less.

<sup>3</sup> To learn more about IBM Asset Recovery Solutions, please visit: [ibm.com/financing/us/recovery](http://ibm.com/financing/us/recovery).

<sup>4</sup> All limited warranty terms are for one year. For a copy of the terms and conditions of IBM's statement of limited warranty, contact your IBM representative or reseller.

<sup>5</sup> Systems with limited on-site service are designed to be repaired during the applicable warranty period primarily with IBM supplied replacement parts, installed by trained IBM service technicians at the customer's location. IBM will only send a technician on-site to perform a repair if (a) the remote telephone diagnosis and/or customer part replacement is/are unable to resolve the problem, or (b) the part is one of the few designated by IBM for customer replacement. For a list of customer replaceable parts, contact IBM. Support unrelated to a warranty issue may be subject to additional charges.

<sup>6</sup> IBM now offers branded paper supplies. For more information, please contact your IBM sales representative.

<sup>7</sup> Epson emulation mode supports direct communication with the printer using the Epson ESC POS command set for printers connected via RS-232 interface. Epson emulation is not supported in driver environments.

<sup>8</sup> Please visit the IBM support Web site at [ibm.com/support](http://ibm.com/support) to obtain the latest compatibility data for operating systems, interfaces and IBM hardware.

<sup>9</sup> Some printer functions may not be supported by all combinations of operating systems and drivers. Model 1NR has a 'compatibility' mode that enables some, not all, features of the product reusing existing drivers in each operating system environment. See User Guide for more detail.

\* The energy consumption efficiency is the value of the power consumption measured in accordance with the measuring method specified by the Japan energy saving law divided by the Composite Theoretical Performance specified by the energy saving law.

