Rugged electronic substitutes for the clipboard

IBM 2488 Pen-Based Computer Models 300 and 800

Highlights

Model 300

- ***Compact, 6-inch-diagonal LCD transflective screen, high-quality 640 x 480 VGA resolution with up to 64 levels of gray***
- ***486SLC, 50-MHz microprocessor***
- ***Designed to withstand rough handling in field and industrial environments and weighs approximately 1 kg (2.2 lb) with battery***
- ***Designed and manufactured to resist water, dust, humidity and a 4-foot drop onto concrete***
- ***Programmable 4-MB flash ROM, 8-MB RAM***
- ***One user-accessible PCMCIA slot that can house either one Type II or one Type III card***
- ***Character recognition and signature capture capability***
- ***Optional internal laser scanning capability***
- ***Rechargeable 1400-mAh NiCd battery pack***
- ***Optional 2.4-GHz Direct-Sequence, Spread-Spectrum radio and antenna***

Model 800

- ***Full-sized, 9.5-inch-diagonal LCD transflective screen with high-quality 640 x 480 VGA resolution with up to 64 levels of gray***
- ***486DX/2, 50-MHz microprocessor***
- ***8 MB of standard RAM, expandable to 16 or 32 MB***
- ***Two user-accessible PCMCIA slots that can house one Type III or two Type II cards***
- ***Optional 40-MB or 60-MB solid-state hard disk or shock-mounted 540-MB rotating IDE disk***
- ***Rechargeable 2700-mAh NiCd battery pack***
- ***Various optional scanning capabilities***
- ***Optional 2.4-GHz Direct-Sequence, Spread-Spectrum radio and antenna***



Model 300



Model 800

Family of wireless, handheld computers

The IBM 2488 family of rugged, wireless, pen-based computers offers today's mobile worker features and functions previously unavailable in go-anywhere computing and real-time data collection devices. These products are unique, portable data-management tools that combine the advantages of pen-based technology with advanced bar-code scanning and wireless data-communication capabilities. Size is not always the indicator of processing power and speed. These lightweight, compact, handheld computers have highly integrated microprocessors for PC compatibility, for your most demanding data management needs. Ergonomically designed, these small computers enable the worker to put in a full day of comfortable use.

The shock-mounted, scratch-resistant displays provide clear viewing of even the most intricate graphics, both indoors and out. Advanced technology enables rapid, accurate, data input through the touch of a finger, use of a stylus or an optional numeric keyboard, and also through a plug-on laser bar-code scanning module. With the advanced pen interface, users can complete application-specific forms, writing data directly on the screen as they would on paper.

Go-anywhere computers

Intelligent power management and a proprietary power-status monitoring system maintain ample energy for a full work shift. These small computers go anywhere data needs to be gathered, instead of taking the information to the computer, for real-time mobile data transactions. They are designed to be used in a wide range of weather conditions, from heat to driving rain, in a wide range of temperatures. The high-impact cases are ruggedized and sealed to withstand shock, as well as moisture and dust intrusion and electrostatic interference.

Communications

When LAN communication is required, these pen-based computers can be ordered with integrated 2.4-GHz Direct Sequence, Spread-Spectrum radios. A variety of PCMCIA modems are also available. I/O ports provide an interface to a variety of peripherals, such as printers, scanners, keyboards and docking stations. Optional quick-connect charging and communication cradles facilitate fixed-station or mobile work applications.

Optional internal radio

Real-time communication capabilities can be expanded with an optional, internal radio. With the optional 2.4-GHz radio installed, the 2488 becomes another member of the AS/400® wireless LAN family of products. This wireless LAN radio provides secure, interference-free communication in a local network, such as a factory complex, warehouse, hospital or truck depot. It enables these computers to be easily integrated into such networks as Ethernet, Token-Ring or RS-485 using the appropriate Access Points that are available.

IBM 2488 Pen-Based Computer Models at a Glance

	Model 300	**Model 800**
Dimensions		
Length	211 mm (8.3 in.)	311 mm (12.25 in.)
Width	135 mm to 146 mm (5.3 in. to 5.7 in.)	241 mm (9.5 in.)
Depth	65 mm to 78 mm (2.6 in. to 3.1 in.) at hand grip	38 mm to 51 mm (1.5 to 2 in.)
Weight	0.94 kg (2.07 lb) with battery pack 1.22 kg (2.7 lb) with internal radio	2.16 kg (4.75 lb) base unit with battery pack 2.3 kg (5 lb) with internal radio
Operating environment		
Temperature	-20° to 50°C (-4° to 122°F)	-20° to 50°C (-4° to 122°F)
Relative humidity	0% to 95% noncondensing	0% to 95% noncondensing
Storage temperature	-40° to 70°C (-40° to 158°F)	-40° to 70°C (-40° to 158°F)
Power	• 1400-mAh capacity NiCd battery pack • Integrated fast charger for circuitry • Low battery and charging LEDs • DC power input 18 V, 800-mAh output • Automatic suspend mode for battery changes without reboot • Charging time 2 to 3 hours (backup bridge battery if pack removed)	• 1700-mAh capacity NiCd rechargeable battery pack • Integrated fast charger circuitry • Five power status LEDs indicate charge level while charging • Charging time 2 to 3 hours (unit turned off or in operation) • DC power input 18 V, 800-mAh output • Suspend-and-resume power conservation switch • Selectable automatic or manual system standby and backlight shutdown • Automatic suspend mode allows battery changes without reboot
Warranty	One year	One year

Part of a total system solution

The IBM 2488 Pen-Based Computers can be of significant benefit to end users who need mobile, roaming access to computing facilities within a building or campus area. In the past, computer access was limited to places that could be directly wired to the host system.

Generally positioned as a mid- to low-cost product, the IBM 2488 family was designed to be used as part of a total system solution in a wide variety of industries such as health care, travel and transportation, manufacturing and warehousing, financial services, retail and gaming.

Serial port connections

Model 300's 15-pin, serial port for both a keyboard and power supply allows connection of any standard serial device using one of several special adapter cables. The port also allows connection to an AT-type keyboard for programming and maintenance. Model 800's 8-pin, mini-DIN serial ports allow you to connect to common serial-type devices, including a keyboard. A converter cable is available to attach standard AT-type keyboards. For charging, the units connect to either an ac adapter or a vehicle cigarette lighter power adapter. A four-bay battery fast-charger is also available for Model 300.

PCMCIA connectors

Additional I/O devices can be connected to the 2488 products via industry-standard Type II and III PCMCIA slots, which accept credit-card-size devices such as static RAM, network interface and data/fax modem. Model 800 also has an internal PCMCIA slot for use by the optional internal modem. Model 300 is capable of initial program load (IPL) from the SRAM card.

Installation Information

Software/operating support		MS-DOS 6.22
Optional application environments		• Microsoft Windows for Pen Computing • PenRight! for Windows (Runtime) 3.6 • Microsoft Windows for Workgroups • PCMCIA card and socket services support
Application software compatibility		• Client/server environment • Host emulation packages: 3270, 5250, ANSI/VT220 • Microsoft Windows applications • DOS applications
Hardware	**Model 300**	Model 800
	• 486SLC, 50-MHz microprocessor • 4-MB flash EPROM and 4-MB RAM, 256-KB ROM dedicated to BIOS and operating system • Display: monochrome, 151-mm (5.94-in.) diagonal, VGA, transflective LCD display with 640 x 480 pixel resolution, 64 levels of gray and switch-adjustable contrast and brightness. Display is scratch- and impact-resistant. • Viewable screen size 91 mm x 121 mm (3.57 in. x 4.76 in.) • High-precision electromagnetic digitizer with 480-dpi resolution • Ergonomic passive stylus with tether • Optional, standard-range laser-scanner module with integrated or external, standard, handheld laser-scanner or pencil wand supported via RJ-41 module. Recognized bar codes include U.P.C., EAN, Plessey, Code 39, Code 11, 2 of 5, Interleaved 2 of 5, Codabar, Code 128, Code 93 • Optional printer support via built-in RS-232 port	• 486DX/2, 50-MHz microprocessor • 256-KB flash EPROM used for BIOS and operating system • 8-MB base RAM with 16-MB or 32-MB RAM optional • Optional 540-MB rotating hard disk • Optional 40-MB or 60-MB internal solid-state disk • One PCMCIA Type II slot and one PCMCIA Type II or III slot • Display: 241-mm (9.5-in) diagonal, VGA, transflective, monochrome LCD screen with 640 x 480 pixel resolution, 64 levels of gray and keypad-adjustable contrast and brightness. Display is scratch- and impact-resistant with 1000-dpi resolution. • Viewable screen size 140 mm x 191 mm (5.5 in. x 7.5 in.) • Plastic electromagnetic pen with power management • Optional, metal electromagnetic pen with power management • Optional, handheld laser or pencil scanner support via enhanced RJ-41 port or serial port • Recognized bar codes include U.P.C., EAN, Plessey, Code 39, Code 11, 2 of 5, Interleaved 2 of 5, Codabar, Code 128, Code 93 • Optional printer support via 50-pin combination parallel and floppy disk port

Other wireless products

To complement the family of wireless handheld devices, IBM has built a collection of wireless modems for ARDIS, Cellular/CDPD and Mobitex. These modems all work with ARDIS, Cellular/CDPD or Mobitex wireless networks throughout the United States and Canada. They are ideal for remote client/server applications, two-way messaging, wireless host access, remote e-mail or fax applications.

In the near future, IBM intends to make available integrated WAN radios for Model 300 that will address Cellular/CDPD, ARDIS and Mobitex RAM networks.

For more information

For more information on IBM wireless products, contact your IBM representative or call 1 800 COM-PROD (1 800 266-7763). To order call IBM Direct at 1 800 IBM-CALL (1 800 426-2255). You can also obtain information from the IBM Wireless Home Page at http://www.raleigh.ibm.com/wireless.

For a faxed copy of this document, access the IBM 4FAX system by dialing 1 800 IBM-4FAX (1 800 426-4329) and requesting item number 5900.

IBM wireless products are available through normal IBM distribution channels.



© International Business Machines Corporation 1996

IBM Corporation
Department DKMA
PO Box 12195
Research Triangle Park NC 27709

Printed in the United States of America
9-96
All rights reserved

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates. Copying or downloading the images contained in this document is expressly prohibited without the written consent of IBM.

AS/400 and IBM are registered trademarks of the International Business Machines Corporation.

Microsoft and Windows are registered trademarks of Microsoft Corporation.

All other company names or products are trademarks or registered trademarks of their respective companies.



Printed on recycled paper



G224-4516-00