



# Personal System/2 Monochrome Displays

## It's all in black and white

Powerful workstations and advanced software allow you to routinely perform text and graphics tasks that simply were not possible a few years ago. But no matter how powerful your computing system or how sophisticated your software, graphics are only as good as the display and graphics adapter you choose.

IBM offers a full range of monochrome displays—in a full range of prices—for general-purpose and specialized work environments. So you can choose the display that best meets your graphics needs at a price that best suits your budget.

Although each IBM PS/2® Monochrome Display is unique—developed for different business environments—they all share similar features designed to give you sharper graphics.

For example, paper-white phosphorous screens make graphics appear crisp and natural. And high screen refresh rates reduce screen "flicker" to give you a consistently stable picture.

IBM PS/2 monochrome displays are based on analog technology, so they can support a variety of graphical modes—VGA, XGA, even CGA and EGA.

What's more, IBM has designed the displays to enhance user comfort and productivity. Crisp character definition; easy-to-read, etched glass screens; Tilt/Swivel bases; and conveniently located brightness and contrast controls—all help users work most efficiently.

Every IBM monochrome display is built to high standards of quality and reliability,



and is backed by a one-year limited warranty. So you can count on your IBM monochrome displays to perform smoothly year after year.

## PS/2 monochrome displays at work

Here are some of the ways you can put IBM PS/2 Monochrome Displays to work for you:

- Run desktop publishing applications such as Aldus PageMaker®

- Boost productivity with powerful graphical user interfaces
- Illustrate publications and other documents with grayscale shading
- Generate graphics for demanding engineering applications
- Handle word processing, spreadsheets, databases and other alphanumeric programs

## IBM Monochrome Display 8507

With the IBM Personal System/2<sup>®</sup> Monochrome Display 8507, you can take advantage of advanced text, graphics and imaging programs in a big way. In fact, this display's high-resolution, 19-inch screen gives you more than a full-size working area for sophisticated applications of every kind.

In addition to 1,024 x 768 resolution, the 8507 display supports a variety of operating modes—so you have complete flexibility to use a wide range of existing software. It can display your color software programs in gray shades and supports popular text and graphics modes.

An impressive 14 x 10.5 inches of viewing area means you have plenty of room to see what you're working on with the 8507 display. When preparing a document with your desktop publishing program, you can easily view several parts of the document at once, zoom in on a detail, or pull back for a wider perspective. You can do complex jobs like cutting and pasting graphics into text or touching up images efficiently.

If you're preparing a spreadsheet, you'll have the space to keep large amounts of information in sight. The 8507 display's big screen can accommodate up to 146 columns by 51 rows of data at one time.

In addition, you can gain windowing capabilities with the 8507 display. Whether you're running a program with Microsoft<sup>®</sup> Windows<sup>™</sup> or the OS/2<sup>®</sup> Presentation Manager,<sup>™</sup> you'll be able to view up to four separate, nonoverlapping windows onscreen.

## IBM Personal System/2 Monochrome Display 8507 at a glance

<b>Part number</b>	8507001
<b>Screen size</b>	19" diagonal; etched to reduce glare
<b>Viewing area</b>	14.0" horizontal x 10.5" vertical (350mm x 265mm)
<b>Maximum resolution</b>	1,024 x 768
<b>Scan frequency</b>	31.5 kHz noninterlaced; 35.52 kHz interlaced
<b>Refresh rate</b>	Up to 70 Hz noninterlaced; 43.5 Hz interlaced
<b>Pels per inch</b>	73 at 1,024 x 768
<b>Aspect ratio</b>	4:3 (at 1,024 x 768)
<b>Phosphor</b>	Black-on-white or white-on-black
<b>User adjustability</b>	Front-mounted on/off, brightness/contrast controls; Tilt/Swivel base, standard
<b>Dimensions</b>	Footprint: 18.7" x 17.0" (475mm x 432mm) Height: 17.7" (450mm)
<b>Weight</b>	Approx. 51.7 lbs. (23.5 kg)
<b>Systems supported</b>	Maximum resolution: PS/2 Models 50, 50 Z and 60 with Display Adapter 8514/A; PS/2 Models 55 SX, 55 LS, 57 SX, 65 through 80 386* with Display Adapter 8514/A or XGA Display Adapter/A VGA modes: PS/2 Models 30 286 through 80 386 via standard display port XGA modes: PS/2 Models P75 486, 90 XP 486, and 95 XP 486 via standard display port
<b>PS/2 integrated graphics support</b>	VGA (640 x 480, up to 16 shades of gray) for Models 30 286 through 80 386 XGA (1,024 x 768, up to 256 shades of gray) for Models P75 486, 90 XP 486, 95 XP 486
<b>Optional graphics support**</b>	8514/A and XGA Display Adapter/A (1,024 x 768, up to 64 shades of gray); Image Adapter/A (1,024 x 768, up to 256 shades of gray) for Models 50 through 80 386

\*Excluding Model P70 386.

\*\*Support for more than 16 shades of gray requires the appropriate memory expansion option.



## IBM Monochrome Display 8506

Ideal for desktop publishing and other text-intensive applications, the IBM Monochrome Display 8506 supports the high-resolution graphics capabilities provided by the PS/2 Image Adapter/A. This high-performance adapter expands the capabilities of the 8506 to facilitate more sophisticated, complex applications; to provide a higher resolution of 864 x 1,200; and to support up to 256 shades of gray.

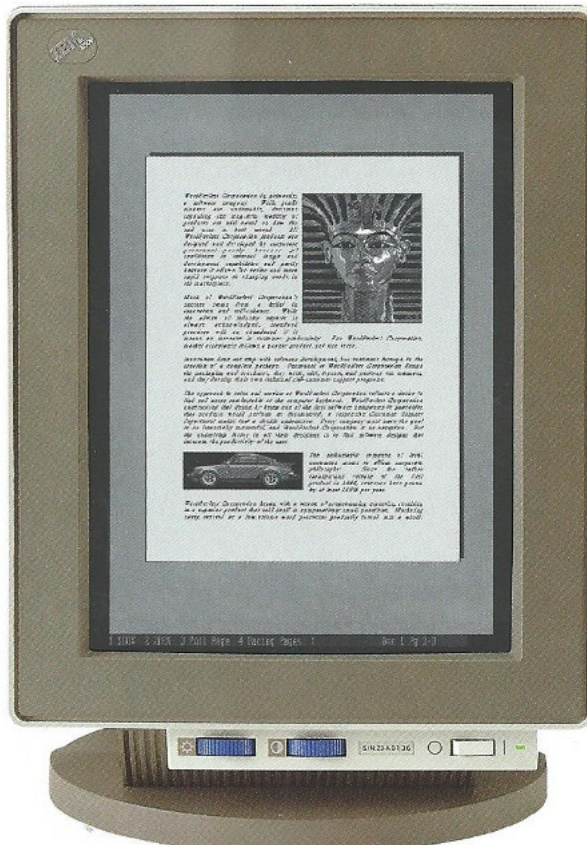
The 8506's 17-inch (diagonal) portrait-style screen shows a full 8½ by 11-inch page of text and graphics. So the display is especially well suited for such business applications as legal documents, insurance forms and large pieces of correspondence. And, with its 100 pels per inch, it gives you sharper, clearer text and graphics.

## IBM Personal System/2 Monochrome Display 8506 at a glance

<b>Part number</b>	8506001
<b>Screen size</b>	17" diagonal; antireflective to reduce glare
<b>Viewing area</b>	8.5" horizontal x 11.0" vertical (216mm x 296mm)
<b>Maximum resolution</b>	864 x 1,200
<b>Scan frequency</b>	50.5 kHz (864 x 1,200)
<b>Refresh rate</b>	Up to 70.8 Hz noninterlaced; 40.1/80.2 Hz interlaced
<b>Pels per inch</b>	100 at 864 x 1,200
<b>Aspect ratio</b>	1:1 (at 864 x 1,200)
<b>Phosphor</b>	Paperwhite for black-on-white or white-on-black
<b>User adjustability</b>	Front-mounted on/off, brightness/contrast controls; Tilt/Swivel base, standard
<b>Dimensions</b>	Footprint: 13.2" x 14.6" (334mm x 371mm) Height: 18.5" (470mm)
<b>Weight</b>	Approx. 48.5 lbs. (22.0 kg)
<b>Systems supported</b>	PS/2 Models 50 through 95 XP 486* with a PS/2 Image Adapter/A installed
<b>PS/2 integrated graphics support</b>	None. Image Adapter/A required with this display
<b>Required graphics support**</b>	PS/2 Image Adapter/A 1MB (864 x 1,200, up to 256 shades of gray)

\*Excluding Model P70 386.

\*\*Support for more than 16 shades of gray requires the appropriate memory expansion option.



## IBM Monochrome Display 8508

At a maximum resolution of 1,600 x 1,200, the 8508 display offers the highest resolution of all the PS/2 monochrome displays. The ultra-sharp resolution makes the 8508 display ideal for advanced image processing and graphics applications.

What's more, the 8508 can operate in both interlaced and noninterlaced modes. Interlacing lets you pare down costs at higher resolutions. Noninterlaced, the 8508, working in conjunction with the PS/2 Image Adapter/A, provides faster performance with 1,360 x 1,024 resolution and with up to 256 grayscales.

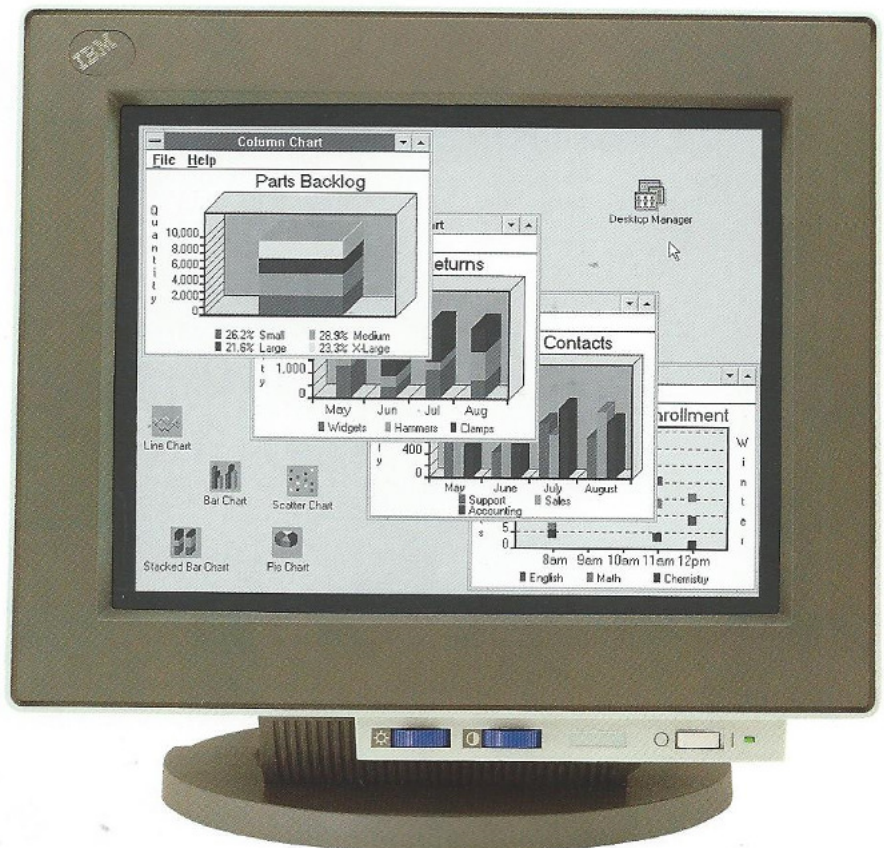
With the 8508, you get high resolution and precision graphics. Thanks to its 114 pels-per-inch capability, picture stability and high resolution, the 8508 provides clear, sharp images every time. Whether you have text, graphics or images on-screen, this display can show you every detail. That's why it's ideal for science and engineering, high-end desktop publishing, imaging, windowing and other applications that demand precision graphics and design.

The 8508's 19-inch screen expands your workspace by offering 160 columns by 52 rows. With this large work area, you can handle oversize documents like oblong financial charts and large page spreads.

## IBM Personal System/2 Monochrome Display 8508 at a glance

<b>Part number</b>	8508001
<b>Screen size</b>	19" diagonal; antireflective to reduce glare
<b>Viewing area</b>	14.0" horizontal x 10.5" vertical (350mm x 265mm)
<b>Maximum resolution</b>	Interlaced: 1,600 x 1,200 Noninterlaced: 1,360 x 1,024
<b>Scan frequency</b>	62 kHz (1,600 x 1,200)
<b>Refresh rate</b>	Up to 93.5 Hz noninterlaced; 49.3/98.6 Hz interlaced
<b>Pels per inch</b>	114 at 1,600 x 1,200
<b>Aspect ratio</b>	1:1 (at 1,600 x 1,200)
<b>Phosphor</b>	Paper-white for black on-white or white-on-black
<b>User adjustability</b>	Front-mounted on/off, brightness/contrast controls; Tilt/Swivel base, standard
<b>Dimensions</b>	Footprint: 18.8" x 17.0" (476mm x 432mm) Height: 17.8" (451mm)
<b>Weight</b>	Approx. 51.7 lbs. (23.5 kg)
<b>Systems supported</b>	PS/2 Models 50 through 95 XP 486* with a PS/2 Image Adapter/A installed
<b>PS/2 integrated graphics support</b>	None. Image Adapter/A required with this display
<b>Required graphics support</b>	PS/2 Image Adapter/A 1MB: interlaced, 1,600 x 1,200, up to 16 shades of gray; non-interlaced, 1,360 x 1,024, up to 256 shades of gray (with 2MB VRAM and 1MB DRAM)

\*Excluding Model P70 386.



## IBM Monochrome Display 8504

The IBM Monochrome Display 8504 is perfect for people who work primarily with text. An economical analog, general-purpose display, the 8504 is supported by the built-in graphics capabilities of the PS/2 family of computers.

The 8504 display is ideal for such text and number applications as legal brief preparation, report writing, spreadsheets and everyday business correspondence. No matter what you're looking at, you'll see a picture that's easy on the eyes—at a price that's easy on the budget.

If your applications are in color, it's no problem. Colors are automatically converted to up to 64 shades of gray—allowing many software programs written for color displays to be used on this display. The many shades of gray allow you to highlight charts, categorize tables and spotlight graphs—even work with windowing applications.

The 8504 gives you enhanced ergonomics as well. A flatter, squarer tube provides a larger image area and reduces glare. Front-mounted controls and a 300-degree swivel stand make it easy to adjust the display to your particular needs. And, thanks to the display's small footprint, you have room to work comfortably.

And there's more to the 8504 than meets the eye. The display's Very Low Frequency (VLF) magnetic fields meet the widely respected Swedish standards.

## IBM Personal System/2 Monochrome Display 8504 at a glance

<b>Part number</b>	8504001
<b>Screen size</b>	12" diagonal; etched to reduce glare (FST*)
<b>Viewing area</b>	8.2" horizontal x 6.2" vertical (210mm x 157.5mm)
<b>Maximum resolution</b>	640 x 480 720 x 400 720 x 350
<b>Scan frequency</b>	31.5 kHz noninterlaced
<b>Refresh rate</b>	Up to 70 Hz
<b>Pels per inch</b>	77 at 640 x 480
<b>Aspect ratio</b>	4:3
<b>Phosphor</b>	White phosphor
<b>User adjustability</b>	Front-mounted on/off, brightness/contrast controls; Tilt/Swivel base, standard
<b>Dimensions</b>	Footprint: 12.0" x 12.1" (305mm x 310mm) Height: 11.5" (290mm)
<b>Weight</b>	Approx. 16.5 lbs. (7.5 kg)
<b>Systems supported</b>	PS/2 Models 30 286 through 95 XP 486;** the following IBM Personal Computers through the use of an optional VGA adapter: IBM PC, PC XT,™ XT™ Model 286, PC AT,® PS/2 Model 30
<b>PS/2 integrated graphics support</b>	VGA (640 x 480, up to 16 shades of gray)
<b>Optional graphics support***</b>	8514/A, XGA Display Adapter/A (640 x 480, up to 64 shades of gray), Image Adapter/A (640 x 480, up to 256 shades of gray)

\*Flatter, squarer tube.

\*\*Excluding Model P70 386.

\*\*\*Support for more than 16 shades of gray requires the appropriate memory expansion option.



## Graphics subsystems—monochrome resolutions

Adapter	Screen resolution support	Displays supported			
		8508	8507	8506	8504
<b>Image Adapter/A 3MB</b>	1,360 x 1,024 x 256 gray shades	•			
	1,280 x 1,024 x 256 gray shades (plus Image Adapter/A 1MB resolutions)	•			
<b>Image Adapter/A 1MB</b>	1,600 x 1,200 x 2/16 gray shades*	•			
	1,360 x 1,024 x 4/16 gray shades*	•			
	1,024 x 768 x 16/256 gray shades*		•		
	864 x 1,200 x 16/256 gray shades*			•	
<b>XGA</b>	640 x 480 x 256		•	•	
	640 x 480 x 64 (plus VGA resolutions)		•		•
<b>8514/A</b>	1,024 x 768 x 16/64** (plus VGA resolutions)		•		
<b>VGA</b>	640 x 480 x 16		•		•
	320 x 200 x 64				•

\*Achieving maximum gray shades requires additional PS/2 Video Memory Kit.

\*\*Achieving 64 gray shades requires additional 512KB of video memory.

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6-91  
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G221-3051-00