

44-inch HP Designjet Z3200ps photo printer evaluation & review



HP Designjet Z3200ps Photo Printer

Wide Format Inkjet Printer Buyer's Guide in FAQs Format

THE BASICS

1. Brand name, model?

HP Designjet Z3200ps Photo. There is a secondary identification code: Q6721A. This is the most complete printer from the Designjet Z series

2. If there are two or three (or more) widths of this printer, what differences exist other than the width?

There are four variations of this model that can be divided into

- HP Z3200 (24")
- HPZ3200 (44")
- HP Z3200ps (24")
- HPZ3200ps (44")

The difference between a basic model and a "ps" model has to do with file format handling capabilities. The language supported in the ps model are

- PCL3GUI,
- Adobe PS level 3,
- HP-GL/2,
- Adobe PDF 1.6,
- TIFF,
- JPEG,

the base model supports only

- PCL3GUI
- Adobe PS level 3

HP-GL/2. Also the ps models comes with an advanced profiling solution, which is a separate eye-one, spectrophotometer for monitor calibration.

3. What is the nature of the company behind the brand name? Is this company the manufacturer, distributor, or rebranding?

HP is the original manufacturer of this model. The company has several other industrial printers but those are not HP brainchild. Scitex, NUR, and ColorSpan are printer manufacturers that have been acquired in recent years by HP.

4. Is this same model(s) re-branded and sold under other names?

No. So far HP is the only manufacturer and distributor.



This evaluation is based on the most complete version of these series, the HP Designjet Z3200ps.

5. What other printers are the same or similar chassis from this manufacturer or distributor?

This series is based on the original HP Designjet Z3100 series. There is another printer that has a similar chassis, the HP Designjet Z2100 series, and on the HP web site they list a HP Designjet Z6100 but this is not a photo printer.

6. Is this printer mature technology or still in alpha-stage or beta-stage?

This is a mature printer, already out of all the preliminary stages, especially because it is a next generation of the Z3100, which has already been discontinued.

7. List price?

\$6,795.00 is the price for the full model that you see in these photographs.

8. What is the street price?

Street price varies; if you buy from a box-pusher you don't get service or tech support. If you wish to have a person that knows printers, fine art photography, and giclée, then it is recommended to consider a value-added dealer (the one we know the best is Parrot Digigraphic, www.parrotcolor.com).



The printer comes with a full set of ink cartridges.



Eye One spectrophotometer. Monitor calibration is essential to obtain image fidelity.

9. What comes with the printer: stand, network connection already installed, take-up reel?

- The printer comes with
- own stand,
- network card Ethernet 10/100
- three different types of power cord, for three different world regions
- Eye-One spectrophotometer
- Small 24" satin photo paper media roll
- 12 printheads
- 12 ink cartridges
- Screw driver and 24 screws to assembly the stand to the printer.

There is no take-up reel in this model, but instead a foldable basket to receive the printouts.

10. What accessories are extra charge? Are these same or similar accessories included with other printers at no extra cost? Explain why this is any different than selling a car without tires, or a computer without a monitor?

In the ps models the Eye One spectrophotometer is included, in the base models you can purchase it from HP.

11. What other costs are involved?

You obviously need to buy your own rolls of media if you want to start printing, the initial 24" is too small, we could only print 5 24"x18" photos.

12. Does a complete set of full-sized ink cartridges come with the new printer, or merely a "starter set" that is not as full as a regular set?

Yes, you receive a full set of twelve 130ml ink cartridges. The ink we got was packed in its original packing material, we where the first to open it.

13. What other equipment is needed to operate this printer? For example, does this printer include its own power line conditioner? Do you need an uninterruptible power supply (UPS)?

A UPS unit would be advisable, especially in locations where electricity is not constant. We are using a Sola power line conditioner to protect the printer.

14. Is it recommended, or required, to buy a spare parts kit? Or extra printheads?

I don't think extra spare parts are required

15. How does the total cost compare with other Inkjet printers?

A Canon iPF 8000, which is also a 44" model is around \$4,650, which is \$2,000 less than the advertised price for the Designjet Z3200ps. BUT.... a spectrophotometer and associated software can cost a lot more than the price difference. Plus, HP has many years experience in making fine art photography and giclee printers.

The Epson 9880 is also a 44-inch printer. It uses 8 ink cartridges and the price for the standard model is around \$4,995. The ColorBurst version has an estimated price of \$5,995

PURCHASING**16. Are dealers national (most companies) or regional (Roland allows a dealer to operate only within a limited regional area)? Does a buyer have any choice in dealers?**

Dealers for HP printers (in the US) come in every size and shape. Several are national (selling all across the USA; again, the one that we know best is Parrot Digigraphic). Some are local. But the main difference is box-pushers (you get a box and that's about it), or value-added (you get service and tech support and help in applications).

17. What kinds of leasing or other financing are available?

HP has several financing/leasing programs, such as Economic Recovery lease, Pay as you Grow. Acquire now, pay later.

SET-UP OF THE PRINTER: PRACTICAL CONSIDERATIONS**18. What are the electrical requirements of this printer?**

110V 50/60 Hz. The model in FLAAR office has a plug similar to that in any other domestic appliance in America (North America or Latin America).

19. What kind of exhaust system is either required, or if not required, what would common sense dictate?

There is no need for an exhaust system, since the printer does not emit considerable amounts of heat nor smell.

20. What is the connectivity? Network, SCSI, FireWire, or other?

- 1000Base-T Ethernet RJ-45 port
- Hi-Speed USB 2.0 certified port
- EIO Jetdirect accessory slot

21. What about altitude? Some cities such as Guatemala City are at a high altitude?

Not a problem, for this city, and we are at 1500 meters above sea level

22. What about dust and cleanliness of the air?

Not an issue with this printer, and Guatemala occasionally has volcanic ash in the air from constant eruptions (you can see an erupting volcano from the window of the FLAAR office). But prints should be handled with care as any other fine art print.

23. Realistically, how much surrounding and support space will the equipment need in addition to the machine's own footprint.?

The printer will occupy at least 1x2 meters, but you will need a table or some space to place the prints once they are out of the printer.



The stand comes disassembled in a box. Bolts and screwing tools come in a bag inside the box.



Instructions to assemble the stand are clear. As mentioned earlier, the printer comes with its own screw driver.

24. What is the size and weight of the printer?

WxDxH = 69.7 x 27.2 x 41.2 in. Weight is 189 lb.

25. How many boxes arrive?

Just one big box with everything inside

26. How big are the boxes?

A little bigger than the printer WDXH = 69.7 x 27.2 x 41.2 in

27. Does the printer come in one piece?

No, the base or stand comes unassembled. After the stand is put together it has to be attached to the printer.

28. How much assembly is required?

Not much really, only the stand has to be assembled.

29. What comes in the box (and which is in which box)?

- HP Designjet Z3200ps 44-in Photo Printer,
- spindle,
- printheads (6 x 2 colors each),
- introductory ink cartridges (x12),
- Original HP media roll, stand (44 in),
- rear tray (44 in),
- adaptor kit (3 in) for spindle (x2),
- quick reference guide,
- setup poster,
- USB cable,
- power cord,
- HP Start-up kit including printer software,
- HP Advanced Profiling Solution

30. What is setup of the printer like?

Easy, not much thinking to do more than follow instructions.



The assembly instructions suggest at least 3 persons to unpack the printer, but you will need at least 4 persons to carry the box.

INSTALLATION OF THE PRINTER

31. Can you install this printer yourself?

Yes.

32. How many people does it take to lift the box?

The help of 4 persons is needed to move it.

33. How many people does it take to lift the printer out of the box?

3 persons.

34. Realistically, what expenses must you incur for the installation, such as a fork-lift truck or crane to lift the printer off the truck?

If shipment is not included, you will need to cover shipment and movers if you do not have friends to ask for help.

35. Is installation included in the purchase price?

Depends on the dealers

INSTALLATION OF THE PRINTER: INSTRUCTIONS & MANUALS

36. How many manuals are available?

The printer came with a start up kit CD, which has some of the manuals, assembly instructions and a quick reference guide.



The Quick Reference Guide comes in English, French, Spanish and Portuguese.

37. Which manuals are hard-copy? Which manuals are only on CD?

The quick reference guide and the assembly instructions are hard copy, the complete manual is electronic.

38. What is the rating of the usefulness of the Setup Instructions?

The assembly instructions are intelligently graphic designed making the user follow each step very clearly. There were no confusions or questions during the assembly process.

39. What is the rating of usefulness of the User's Manual and other associated materials?

We will have to answer this question later when we get more experience with the printer.

40. What kind of cut-away drawings or other drawings exist that show the various parts of the printer?

Actually the drawings of the printer are quite good, the assembly instructions are in black and white but use orange colors to attract the attention to important steps in the assembly process.

41. Is there a glossary in the User's Manual?

Yes, 29 basic terms are covered in two pages of the glossary.

42. What is the native language of these guides? Is the translation acceptable?

The user manual for Latin America comes with English, French, Portuguese and Spanish languages

43. Is there a Service Manual?

We did not find a service manual for the end-user.



The assembly instructions booklet is very clear in most of the procedures, but in some few cases the steps were not easy to understand.

INSTALLATION OF THE PRINTER: TRAINING

44. What training is included with the purchase?

No training whatsoever.

45. Is training included in the purchase price? If so, what kind of training is offered?

No training whatsoever. For Guatemala.

46. Is training necessary? Is classroom training available?

If you are new to printing there will be probably be a High learning curve to understand monitor, printer and media color profiles. Just the Photoshop print dialog box requires a great deal of effort to understand every setting. For Guatemala HP distributors do not offer any training or tech support to help the end-user understand the printing procedures.

47. Is factory training available?

Not for Guatemala.

48. What on-line training is available?

Not for Guatemala

49. What about follow-up training after you have had the printer a month and know enough to ask better questions?

Not for Guatemala

50. Between the day the printer arrives, how soon is it realistic to achieve full productivity?

You can start printing the same day the printer arrives,

TECH SUPPORT & WARRANTY

51. What is the original warranty period?

One year.

52. What tech support is available and for how long? What is the wait time on the phone...truthfully?

There are two authorized distributors in Guatemala who have trained technicians for tech support.

CONSTRUCTION: BUILD QUALITY

53. Can you see how the print job is doing without opening the hood? Does opening the hood cause the printer to stop printing immediately?

There is a dark plastic window, if you open this window the printer stops immediately.

AESTHETICS

54. How would you describe the design of the printer?

Well designed, well constructed.

55. Can you easily distinguish which is the "front" and which is the "back"?

Yes there is no mistake.



You can easily distinguish the front from the back. Especially because of the location of the control panel.

STRUCTURE OF THE MEDIA PATH

56. Where do you load the media? Front, back, top, lower down?

The media is loaded from the back, roll or individual sheets.

57. How is the roll held at the feeding position?

On a spindle

58. Is there a take-up reel? If not, how is media collected?

There is a foldable basket

59. Is there a cutter? Is it manual or automatic.

The cutter is automatic but you can turn it off at any moment.

60. Can the on-board cutter cut all normal materials, or only thin materials? Can you cut canvas?

The cutter can cut all sorts of HP papers and other paper brands, but it cannot cut canvas.

STRUCTURE: Miscellaneous

61. Does the printer have wheels? How many, and how strong? Are the wheels double or single per unit?

The printer stand has four wheels.

62. Do the wheels have locks? On all four wheels, or only front wheels?

There are locks on all four wheels.

63. In the main area for operation, is the machine software based (touch screen), or with physical control buttons? Or Both?

Both.

64. How many operators or operator assistants does this printer require?

No assistants, only one operator.

65. What is done on the printer's LCD as compared to what aspects of the printer control are done from the separate print server (where the printer RIP software is handled).

The same settings on the LCD can be controlled from your computer software.

66. What is the level of ease of use? Can anyone use this printer or do they have to be trained and certified?

Not trained or certified but you must know about printing, media profiles and basic color management knowledge, otherwise you will have a high learning curve. You will probably be able to print perfectly without any of these knowledge but you wont understand what you are doing.

67. What is the size of the LCD panel?

The LCD panel is small but very well illuminated.

68. Is the position of the LCD screen or monitor user-adaptable?

Not adaptable

69. What aspects of the printer can you operate from behind (the loading area)?

From behind there is access to main power supply, main power button, Ethernet card, and loading area.

70. What controls are on either end?

Power cord, main power button, Ethernet card and paper spindle is in the rear. LCD panel and Ink cartridges are in the front six cartridges on each side.



Media is loaded at the back. The instructions to properly load the roll of media were not very clear in the sense that the manual mentions lefts and rights, but it is hard to know if they mean viewed from the back or from the front.



The LCD panel is modest in size and in terms of what you can do.

PRINthead TECHNOLOGY

71. Is the brand and model of printhead clearly identified in the published specifications?

No

72. What printhead technology does it use?

HP Thermal Inkjet

PRINthead DPI & FEATURES

73. How many nozzles per printhead?

2112 nozzles per print head

74. How many printheads per color?

One printhead for two colors

75. What is the drop size in picoliters?

4 pl (lc, lm, lg, pK, E, G), 6 pl (M, Y, mK, R, GN, B)

PRINthead LIFE EXPECTANCY

76. What does each printhead cost to replace?

\$ 66.50 per printhead

77. Is the printhead user installable?

Yes

PRINthead POSITIONING

78. How many total number of printheads?

The printer came with 6 units of 2 printheads each, 12 printheads in total.

79. Are printheads arranged in a cluster, or in an array?

In a cluster.

80. Are printheads at an angle, or in a row?

In a row

81. Is there a sleep mode? Should the machine ever be turned completely off? Does not entail having a UPS unit to guarantee it is on all the time?

There are three types of sleep modes for the printer so it does not need to be turned completely off.



Each printhead handles two colors.



HP Start-Up Kit, in CD. You install the printer as a normal desktop printer; there is no need of a RIP software.

PRINTER DRIVERS & RIP SOFTWARE: WHAT SHIPS WITH THE PRINTER?

82. What software ships with the printer?

HP printer manager utility, HP advanced profiling solution.

PRINTER DRIVERS & RIP SOFTWARE: FEATURES

83. Does a RIP come with the printer at no extra cost?

No, no RIP is included

84. Is your printer and/or RIP Pantone certified?

Yes

85. Can your printer function without a RIP with a Macintosh or only with a PC? In other words, are your drivers for PC only or for Mac and PC? Do you get full functionality with a Mac driver compared to a PC driver?

The printer can function without a RIP

86. Is your printer equally Mac friendly?

Yes very Mac friendly.

COLOR MANAGEMENT FEATURES

87. What color management software is included?

HP Advanced profiling solution



The spectrophotometer is one of the advantages of these full model over the other models of this series.



There are six cartridge slots at each side of the printer.

88. What color management tools are included within the printer?

An internal spectrophotometer is included.

89. Is the color management system included in initial price, or is it an add-on optional expense?

With the ps models it is included on the original price.

INK: COST

90. Does ink come in cartridges or bulk? How large are the ink containers for replacement ink?

130ml ink cartridges



This model prints up to 44", but there is a smaller version that prints up to 24".

91. What is the cost per container? What is this cost translated to liters?

\$ 78.50 per each 130ml container, that is \$ 942.00 to replace the full set.

	How many ml per cartridge	How much per cartridge	How much per liter
HP Z3200	130ml	\$ 78.50	\$603.85
Canon iPF 8000	330ml	\$162.75	\$493.18
Epson Stylus Pro 9880	110ml	\$69.95	\$635.91
	220ml	\$112	\$509.09

92. Does the printer software provide usage and accounting information on each print job?

Actually the printer utility keeps track of the media usage and information on the prints made.

MEDIA: size

93. What is maximum width of the roll?
44 inches

94. What thickness can this printer handle?
Up to 31.5 mil

APPLICATIONS

95. What are the applications listed by the manufacturer?

Primary applications:

- Photos
- Digital fine art
- Graphics design
- Layouts and comps;
- Mockups;
- Proofs;
- Proofing.

Secondary applications:

- Presentations;
- Posters;
- Banners;
- Displays;
- POP/POS.

Ideal for: Creative professionals who want to produce accurate gallery-quality black-and-white and color prints easily, consistently, and cost-effectively.



Jaime Leonardo, photographer holding some of the print samples of his photographs taken at the Museo Nacional de Historia Natural (National Museum of History), Guatemala.



Eduardo Sacayon, photographer and photo studio coordinator at FLAAR, evaluating the print samples with the HP Z3200 printer.





Work-in-Progress

This evaluation will run for more than a year. Yes, this is because we are not a sham-review site. Sorry, we actually use the printers and digital cameras and scanners that we write about. Plus, we are typical end-users (again, not a commercial site creating pseudo reviews just to push one brand). FLAAR has used Epson and Canon, indeed we had four Epson Stylus Pro printers in recent years (and two Canon iPF printers).

The printer arrived only a few weeks ago, so we have a long way to go in evaluating this equipment. But I can comment that installation and set-up was a breeze.

And, the first prints (that we needed quickly so I could take them to Antigua Guatemala to help guide us in a complex panorama shoot of a 16th century Spanish colonial) came out perfectly. And this was before we even had time to learn all the options this printer offers.

HP has substantial resources to develop the level of technology built into this printer. I have been to the world headquarters of HP wide-format printers in Barcelona, Spain, five times in the last seven years, as well as about three times to the huge HP facilities north of San Diego, California. When you see their facilities and meet all the engineers and color management people who create their printers you can see why they are market leader.

Since I have not been to Canon Japan or Epson Japan, I can't comment on what facilities they offer, but I have been to printer manufacturers in Korea, Taiwan, throughout China, Canada, and all around Europe. In this aspect the FLAAR evaluations and reviews are unique, in that our staff literally travel around the world to learn about wide-format inkjet printers.

Over the coming weeks we will be updating this report with a succinct list of pros and cons.

If you would like an assessment of the differences among this HP and the Canon iPF and Epson Stylus Pro printers, try to find a dealer who sells all three brands (because if a dealer sells only one or two brands they will push the ones they have). I have visited one nation-wide dealer who has all three brands in his showroom, Parrot Digigraphic. What sets this place apart from others is that they are the only HP, Canon, and Epson dealer in the world that handles the complete professional workflow for fine art giclee (sorry, they are the only location where you can see both BetterLight and Cruse giclee scanners sitting side-by-side; you can't see this even in Europe).

Evaluation of Inkjet media

In our subsequent updates we will evaluate fine art giclee and photography media. This will begin with the HP media that we received, but as soon as these rolls are used up we will switch to other media that becomes available for evaluation.

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