HP Designjet L65500 Printer

Overview
Designed with the environment in mind, the HP Designjet L65500 Printer featuring HP Latex Inks and HP Wide Scan Technology offers print service providers (PSPs) a versatile print system that can produce a wide range of applications – from point-of-purchase displays, transit signage, wall murals and exhibition graphics to vehicle graphics and fleet marking, and a variety of exterior and interior event signage. Together, these technologies provide durable, odorless(1) prints; sharp, vivid image quality; application versatility; and high productivity, enabling PSPs to increase their print capacity and grow their businesses while reducing the impact of their printing on the environment.

Achieve outdoor and indoor application versatility
The HP Designjet L65500 Printer with HP Latex Inks produces durable outdoor and indoor applications up to 104 inches (2.64 m) that withstand the elements while also providing high-resolution image quality – up to 1,200 dpi. Outdoor prints produced with the HP Designjet L65500 and HP Latex Inks on Original HP printing materials achieve display permanence of up to three years un laminated and up to five years laminated and are scratch, smudge and water resistant (on water-resistant substrates). HP Latex Inks are expected to provide good image quality, display permanence and durability on most low-cost, uncoated and low-solvent-compatible media.

HP large-format media, HP Latex Inks and the HP Designjet L65500 Printer are designed and tested together to provide optimal results with every print. HP offers a variety of large-format media – including recyclable substrates(3) – for optimal results with HP Latex Printing Technologies. A proprietary HP media surface-treatment technology – designed together with the HP Designjet L65500 Printer – produces a wide color gamut and makes it possible to achieve both durability and sharp, vivid image quality on materials that typically do not print well with low-solvent inks.

Innovative supplies reduce the impact of printing
Water-based HP Latex Inks provide many of the benefits of low-solvent ink technology without imposing the typical environmental, health and safety considerations. Odorless prints(1) produced with HP Latex Inks emit extremely low levels of volatile organic compounds (VOCs). There is no special ventilation required,(4) facilitating an improved printing environment. HP Latex Inks are also non-flammable and non-combustible.(5) In compliance with Nordic Swan criteria version 4.2, HP Latex Inks do not produce ozone emissions during printing and contain no hazardous air pollutants (HAPs).(6)

High-speed, high-quality printing for new levels of productivity
HP Wide Scan Printing Technology delivers high productivity and high image quality using two proprietary HP technologies working together: HP Wide Scan Printheads and...
the HP Optical Media Advance Sensor (OMAS). With HP Wide Scan Printheads, the HP Designjet L65500 Printer enables consistent, high-quality output at high print speeds.

The HP Designjet L65500 Printer features three 4.25-inch (108 mm) printheads with a total of 31,680 nozzles that support a firing frequency of up to 24 KHz and produce an 8.5-inch print swath. The printheads, combined with precise media advancement using HP OMAS, facilitate outdoor-quality prints at up to 79 m²/hr (846 ft²/hr) and indoor-quality prints at up to 34 m²/hr (368 ft²/hr). With 10,560 nozzles per printhead, the HP Designjet L65500 uses three printheads, each containing two colors of ink, to produce high-resolution indoor prints at up to 1,200 dpi with a 12 picoliter drop size, allowing for a wide color gamut and sharp details while meeting the demands of high-speed, high-production-volume printing.

Key features and benefits

- Outdoor prints produced with HP Latex Inks achieve display permanence up to three years unlaminated and up to five years laminated and are scratch, smudge and water resistant on a range of media, including Original HP printing materials – performance comparable to low-solvent ink technology. (2)

- Indoor prints produced with HP Latex Inks achieve display permanence in-window up to five years unlaminated and up to 10 years laminated on a range of media, including Original HP printing materials. (8)

- HP 786 Designjet Printheads together with HP 786 Latex Designjet Ink Cartridges produce sharp, vivid image quality across a variety of media, including most low-cost, uncoated low-solvent compatible media. With a design that supports an ink drop size as small as 12 picoliters, these printheads achieve the precision required to produce a wide color gamut and sharp detail – performance comparable to low-solvent ink technology.

- High-resolution – up to 1,200 dpi. Print sharp, readable text as small as 4 point.

- HP Wide Scan Printing Technology – consisting of three scalable, high-speed HP Wide Scan Printheads – together with HP’s proprietary OMAS, deliver outdoor-quality prints at up to 79 m²/hr (846 ft²/hr) and indoor-quality prints at up to 34 m²/hr (368 ft²/hr). (7)

- HP 786 Designjet Printheads support a firing frequency of up to 24 KHz. Each printhead contains two colors of ink and 1,200 nozzles per inch – or 10,560 nozzles per printhead – for precise, accurate placement of ink on the page, enabling high-speed, high-productivity printing.

- HP Latex Inks produce odorless(1) prints. Prints are durable enough for demanding applications such as outdoor displays, but lack the noticeable odor that can limit indoor applications – a characteristic more typical of prints produced with low-solvent ink technology.

- Print color consistently across a range of temperature and humidity conditions over the life of the printer with HP DreamColor Technologies. The HP Designjet L65500 uses an embedded spectrophotometer to automatically scan a printer-generated color target, measure its properties, then make and record any corrections allowing for fully automated color calibration.
• HP Latex Inks achieve the optimum in high quality, consistent performance and application versatility on Original HP large-format printing materials, designed together with HP Latex Inks. The variety of HP media includes both outdoor and indoor substrates, and ranges from low-cost, uncoated media to a selection of banner, self-adhesive, fabric, paper, mesh and specialty options.

• The HP large-format printing materials portfolio includes five recyclable substrates, including HP HDPE Reinforced Banner, HP DuPont Tyvek Banner, HP Heavy Textile Banner, HP Wrinkle-free Flag with Liner, and HP Photo-realistic Poster Paper.

• Prints produced with HP Latex Inks on HP recyclable media can be returned through the HP Large-format Media take-back program, now available in the United States and Europe.

• Unlike printers using low-solvent inks, the HP Designjet L65500 Printer using water-based HP Latex Inks and HP 786 Designjet Printheads does not require daily, manual printhead maintenance.

• Individual HP 786 Designjet Printheads are user replaceable, eliminating the downtime and expense of a service call. Replace ink and media less frequently with 3-liter ink cartridges and 110 kg media roll support.

• Designed to reduce the impact of printing on the environment, the innovative new design of HP 786 3-liter Latex Designjet Ink Cartridges includes a recyclable cardboard container that reduces materials use and maximizes usable ink.

• Water-based HP Latex Inks are completely cured inside the HP Designjet L65500 printer to form a durable film on the print medium. Prints come out of the printer ready to use, finish and prepare for shipment, enabling high productivity.

• For seamless integration with customers’ existing workflows, HP is working with major software RIP vendors, including Caldera Graphics, EFI, GMG, Onyx Graphics, PosterJet and SA International, to develop solutions for the HP Designjet L65500 Printer.

**Technical specifications**

- **Print speeds:**
  - Outdoor-quality prints at up to 79 m²/hr (846 ft²/hr)
  - Indoor-quality prints at up to 34 m²/hr (368 ft²/hr)

- **Print resolution:** Up to 1,200 dpi

- **Media**
  - Handling: Roll feed
  - Types: supports most low-cost, uncoated, low-solvent compatible media
  - Size: Up to 104 inches (2.64 m) wide
  - Loading: Up to 110 kg (242 lb), up to 25 cm (9.8 inch) outside diameter

- **Printing**
  - Six-ink printing with HP 786 3-liter Latex Designjet Ink Cartridges: cyan,
magenta, yellow, light cyan, light magenta and black
- Three total HP Wide Scan Printheads (each contains two colors – cyan/black, yellow/magenta, light magenta/light cyan)
- Ink Type: HP Latex Inks
- Nozzles: 10,560 per printhead
- Outdoor display: up to three years unlaminated, five years laminated, on a range of media, including Original HP printing materials (2)
- Indoor display: up to five years unlaminated, 10 years laminated, on a range of media, including Original HP printing materials (8)
- Ink drop: 12 picoliters

- The HP 786 Designjet Maintenance Kit, including a printhead cleaner roll and two air filters, keeps the HP Designjet L65500 printer operating at peak performance.
- Interfaces: Gbit Ethernet

**Supported Original HP Latex printing supplies for HP Designjet L65500 Printer**
- Original HP ink cartridges
  - HP 786 3-liter Black Latex Designjet Ink Cartridge
  - HP 786 3-liter Cyan Latex Designjet Ink Cartridge
  - HP 786 3-liter Magenta Latex Designjet Ink Cartridge
  - HP 786 3-liter Yellow Latex Designjet Ink Cartridge
  - HP 786 3-liter Light Cyan Latex Designjet Ink Cartridge
  - HP 786 3-liter Light Magenta Latex Designjet Ink Cartridge
- Original HP printheads
  - HP 786 Yellow/Magenta Designjet Printhead
  - HP 786 Cyan/Black Designjet Printhead
  - HP 786 Light Magenta/Light Cyan Designjet Printhead
- Original HP maintenance kit
  - HP 786 Designjet Maintenance Kit
- Original HP printing materials optimized for use with HP Latex Inks
- Banners:
  - HP Durable Frontlit Scrim Banner
  - HP Outdoor Frontlit Scrim Banner
  - HP Backlit Scrim Banner
  - HP HDPE Reinforced Banner (recyclable) (3)
- Self-adhesive materials:
  - HP Permanent Gloss Adhesive Vinyl
- HP Permanent Matte Adhesive Vinyl
- HP Wrinkle-free Flag with Liner (recyclable) \(^{(3)}\)
- HP Heavy Textile Banner (recyclable) \(^{(3)}\)

Fabric
- HP Blue Back Billboard Paper
- HP Photo-realistic Poster Paper (recyclable) \(^{(3)}\)

Papers
- HP Mesh Banner with Liner
- HP Satin Canvas
- HP DuPont Tyvek Banner (recyclable) \(^{(3)}\)

Availability
The HP Designjet L65500 Printer is currently available. For specific information on pricing and availability, customers should contact their regional HP representatives.

Additional information

More information about HP large-format printing supplies and printing materials is available at [www.hp.com/go/designjet/supplies](http://www.hp.com/go/designjet/supplies).

\(^{(1)}\) Printers using HP Latex Inks use internal heaters to dry and cure the latex polymer film. Some substrates may have inherent odor.

\(^{(2)}\) HP image permanence and scratch, smudge, and water resistance estimates by HP Image Permanence Lab. Display permanence tested according to SAE J1960 using HP Latex and low-solvent inks on a range of media, including HP media, in a vertical display orientation in simulated nominal outdoor display conditions for select high and low climates, including exposure to direct sunlight and water; performance may vary as environmental conditions change. Scratch, smudge, and water resistance tested using HP Latex and solvent inks on a wide range of HP media. Laminated display permanence tested using Neschen Solvoprint Performance Clear 80 laminate. Results may vary based on specific media performance.

\(^{(3)}\) HP offers the HP Large-format Media take-back program in the U.S. and Europe, through which most HP recyclable signage media can be returned, availability varies. Some recyclable papers can be recycled through commonly available recycling programs. Details are available at [www.hp.com/recycle](http://www.hp.com/recycle). Aside from this program, recycling opportunities for these products are currently only available in limited areas. Customers should consult local recycling resources for recycling these products.

\(^{(4)}\) Special ventilation is not required to meet U.S. OSHA requirements on occupational exposure to VOCs from HP Latex Inks. Special ventilation equipment installation is at the discretion of the customer – no specific HP recommendation is intended. Customers should consult state and local requirements and regulations.

\(^{(5)}\) HP water-based Latex Inks are not classified as flammable or combustible liquids under the USDOT or international transportation regulations. These materials have been tested per the Pensky-Martins Closed Cup
method and the flash point is greater than 110 deg C.

(6) No ozone products expected based on ink composition and printing technology. The inks were tested for Hazardous Air Pollutants per U.S. Environmental Protection Agency Method 311 (testing conducted in 2008) and none were detected. HAPs are air pollutants which are not covered by ambient air quality standards but which, as defined in the Clean Air Act, may present a threat of adverse human health effects or adverse environmental effects.

(7) Outdoor-quality speed based on printing using full width (2.64 m/104 in) in two-pass unidirectional print mode; indoor-quality speed based on printing using full width (2.64 m/104 in) in five-pass unidirectional print mode. Five-pass print mode is only available on self-adhesive vinyl substrates.

(8) Interior in-window display ratings by HP Image Permanence Lab based on a range of media including HP media. HP in-window predictions based on test data under Xenon-Arc illuminant. Calculation assumes 6,000 Lux per 12-hour day. Laminated display permanence tested using Neschen Solvoprint Performance Clear 80 laminate. More information about print permanence is available at www.hp.com/go/supplies/printpermanence.

(9) Printers using HP Wide Scan Printing Technology employ fully automatic printhead testing and maintenance systems.

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