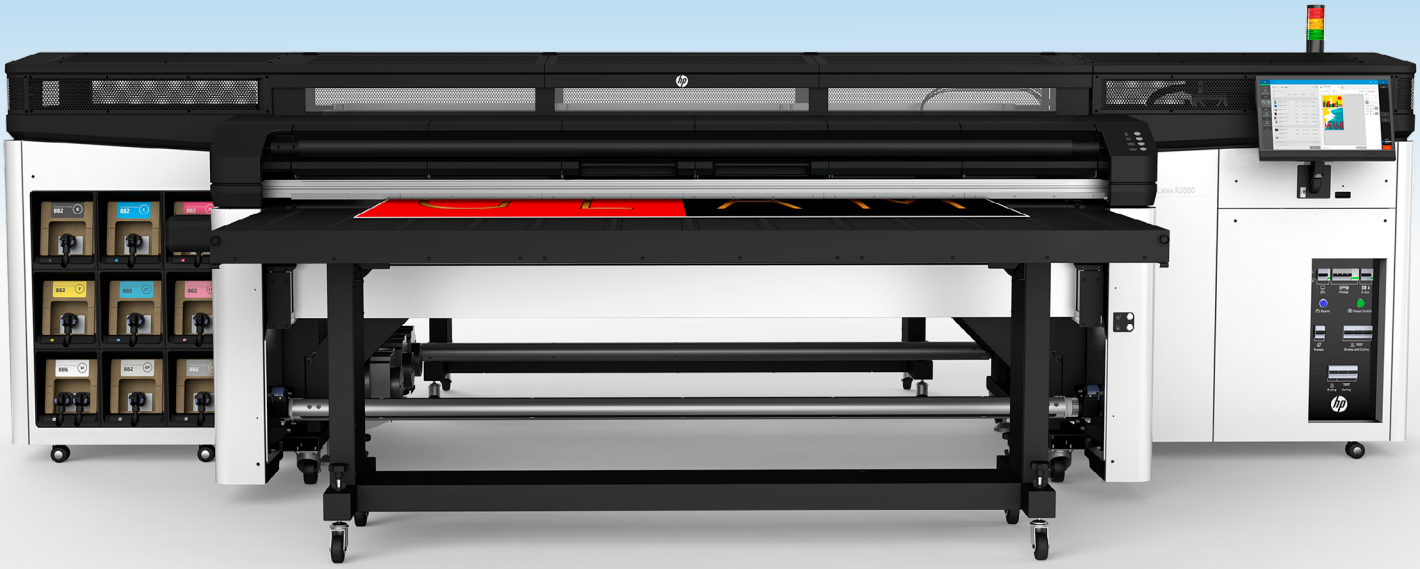
HP Latex R2000 Plus Printer

FAQs

Frequently Asked Questions

This document addresses the questions most frequently asked about the HP Latex R2000 Printer. It complements information provided in sales training material and the existing HP Latex R2000 How to Demo guide.



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01 INSTALLATION

How long does it take to install an HP Latex R2000?

Installation and system configuration of the HP Latex R2000 takes 2 days. Operator training, including maintenance procedures, takes a further 2.5 days.

Does the HP Latex R2000 need to be bolted to the floor?

The HP Latex R2000 printer does not require any fixing to the floor.

What are the load bearing and weight requirements for the HP Latex R2000?

The load-bearing characteristics of the floor in the print production area must be sufficient to withstand the weight of the printer. To calculate the load bearing characteristics of the print production floor, you must consult a structural engineer. The maximum load on each foot of the HP Latex R2000 printer is 800kg (1763lb.), the maximum weight of the printer in its crate is 2700kg (5952lb.) and the maximum weight without substrate is 1587kg (3499lb). For more information please see the Site Preparation Guide.

Do I need a reinforced concrete floor for the HP Latex R2000?

A concrete floor (not necessarily reinforced) is required. A structural engineer should always be consulted prior to installation.

Who performs the installation of the HP Latex R2000?

Installations will be performed by fully trained HP Service or HP Certified Partner Technicians.

What are the dimensions of the crate containing the R2000 printer?

- Height: 2.15m (7ft 0.65in)
- Length: 5.32m (17ft 5.45in)
- Width: 2.19m (7ft 2.3in)

What is the length of the printer?

The HP Latex R2000 is 5.1m (16ft 8.79in) long.

What are the route requirements from unloading site to installation site?

The route between the unloading area of the printer and the installation site, including any corridors and doorways through which the printer must be transported, is important to proper site preparation and must be planned before the arrival of the printer. This pathway must be clear when the printer arrives.

Doorway, ceiling and corridor specifications:

	Printer	Crate
Minimum doorway width	2,05m (6ft 8.71in) *	2.4m (7ft 10.49in)
Minimum ceiling height	2.25m (7ft 4.58in)	2.3m (7ft 6.55in)
Minimum corridor width	2,05m (6ft 8.71in)	2.4m (7ft 10.49in)
Minimum corridor width for a 90° turn	4.4m (14ft 5.23in)	4.4m (14ft 1.29in)

** If you don't have this doorway width, the printer can be partially disassembled, and is able to pass between a width of 1.91m (6ft 3.2in).*

WARNING! After being removed from the crate, the printer can be moved up or down a ramp of no more than 3% inclination.

TIP: Decide when you will remove the printer from the crate. It is recommended that the shipping crate be unpacked as close as possible to the printer's final destination. Usually, the printer is removed from the crate before moving it to the installation site.

Can the curing module be removed for transportation/ installation?

The printer is supplied almost fully assembled and ready for the simple installation procedures described in detail in the installation guide.

How long does the operator ramp up training take?

Operation of the R2000 is intuitive, particularly for operators already familiar with the operation of HP Large Format printers. However, as part of the installation process, detailed operator training, including maintenance procedures, takes approximately 2.5 days.

Are there any special power requirements to run the printer?

The power consumption for the R2000 is typically 10-12kW on a three-phase line, with a maximum load current (per phase) of 56 A.

An electrician is required for the setup and configuration of the building electrical system used to power the printer and also for printer installation. Make sure that your electrician is appropriately certified according to local regulations and supplied with all the information regarding the electrical configuration.

The HP Internal Print Server can be powered with a single-phase line that can be used with an Uninterruptible Power Supply (UPS). The UPS must be rated to meet the power requirements of the printer and should be in accordance with the wiring standards of the country of installation. Please refer to the Site Preparation Guide for detailed specifications.

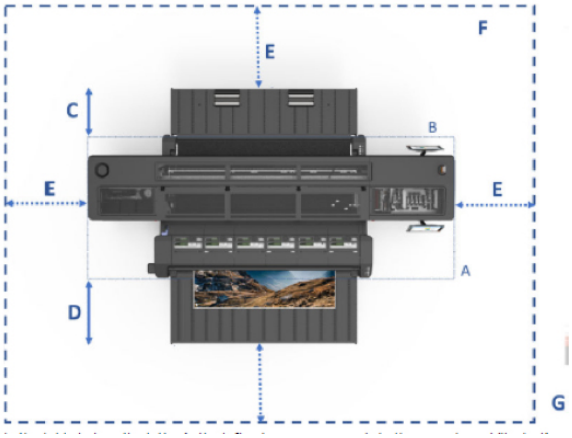
Does it matter where the printer is located?

To ensure that the printer is installed in the correct environment and location, it is critical that those undertaking the installation consult thoroughly the HP Latex R2000 Site Preparation guide prior to installation. Careful consideration should be given to the following:

- Proximity to open doors exposed to cold, humidity or dusty conditions.
- Correct ceiling height.
- Air ventilation: A minimum of 10 ACH (air changes per hour) of fresh air ventilation and a minimum room volume of 185m³ (6533ft³). If there is other equipment in the room, or different conditions, the ventilation rate should be recalculated accordingly.

What is the optimal room layout?

Your printer requires enough space to perform common tasks. The following diagram shows only dimensions for optimal printing layout; to meet ventilation requirements, please refer to the HP Latex R2000 Site Preparation guide.



In the table below, the letter in the left column corresponds to the room layout illustration located to the side.

	HP Latex R2000 Printer (98")
A	2.04m (6ft 8.31in)
B	5.1m (16ft 8.79in)
C	0.65m (2ft 1.59in)
D	0.94m (3ft 1in)
E	1.8m (5ft 9.05in)
F	8.7m (28ft 6.51in)
G	7.23m (23ft 8.65in)

NOTE: The extension tables measure 0.94m (3ft 1in), when using them it is recommended to add this dimension to the recommended space shown in the above table, to all sides of the printer.

NOTE: If very large substrate is to be used, make sure to take it into account when choosing where to install the printer.

NOTE: The ceiling of the room should be at a minimum height of 3m (9ft 8.43in) above the floor.

WARNING! The zone surrounding the printer should be considered a restricted access area and signaled accordingly. Only trained personnel should be operating within this area.

What power level is necessary to facilitate the recirculation? Does it require 3 phase UPS or something similar?

The printer implements a 'Low Power mode' button from the IPS to allow reducing the consumption of the whole machine when only recirculating white ink during prolonged periods of time.

In this mode, two of the three main switches of the printer can be switched off (IPS & Main switch), leaving only the E-Box & W switch connected. In this mode, the consumption of the printer is reduced to ~ 100W.

The customer can configure the electrical system of the printer using one of the following configurations (like all our LX series printers):

- Only a 3-phase system or
- Using a 3-phase system PLUS a single-phase Uninterruptible Power Supply (UPS)

Both configurations (and how they can be connected) are described in the installation guide of the printer.

A suggested UPS configuration would be:

OUTPUT	**Voltage range**	100 - 240 V AC
	Voltage precision	± 10%
	Frequency	50 / 60 Hz ± 2 Hz
	Waveform	Sinusoidal (distortion < 5%)
	Minimum Power (apparent VA / active W)	500 VA / 250 W
BATTERY	**Autonomy time**	Up to the customer

02

PRINTING, SPEED AND DURABILITY

What is the maximum supported thickness of rigid and flexible substrates?

The maximum supported thickness for rigid is 50mm (1.96in). The printer automatically detects and measures the thickness before printing. After reading the thickness, it raises the carriage beam automatically to the correct printing height. No manual input is required by the operator.

The maximum supported thickness for flexible media is 1mm (0.04in). If substrate is thicker, load it as a rigid sheet.

Are there any flexible substrates that are supported on the Latex flexible range that are not supported on the R2000?

Porous medias, e.g. mesh banner and bleed through textiles, are not supported as the HP Latex R2000 Printer does not have an ink collector kit. Also, some very thin media textiles may not be supported due to the nature of the mesh belt.

Can I print full bleed on both rigid and flexible media?

Yes, on both rigid and fexible.

Can the HP Latex R2000 emulate the colors of other HP Latex printers?

The color emulation is possible across R-Series printers, but not between R-Series printers and other Latex printers. There is a simple workflow to follow where you export the OMS from one target printer to the source printer and run a CLC (Closed Loop Color) calibration afterwards. Once achieved, this means you are able to achieve the same color from your sampling machine to the production machine. It's also useful when you need to simulate tiles or paneling on smaller or sample printers. Additionally, some of the mainstream RIP providers offer emulation capabilities and linearization between HP Latex Printers.

What is the OBAS sensor and what does it do?

This is exactly the same sensor technology as the OMAS sensor found in many HP Latex and DesignJet printers. Its primary function is to control the accurate advance of the belt. OBAS stands for Optical Belt Advance Sensor and it measures the belt movement rather than the back of the media to adjust the advancement of the belt

Does the HP Latex R2000 Printer do double-sided block out printing or DSDN (double-sided day and night) applications?

The HP Latex R2000 does not support these two modes automatically. However, it can be done manually (i.e. without the support of the OBAS).As you may know, most of the Latex 1500 and Latex 3000 range support DSDN and double-sided block out. Also, certain models in the Latex 300 & 500 series also support Double sided block out only. There are the 3 layer and 5 layer modes that allows you to create DSDN or Dual sided block out respectively, on transparent materials.

Can existing media profiles from an HP Latex 1500/3000 series be used on an HP Latex R2000 and vice-versa?

The profiles that exist for other Latex printers are not cross compatible, and new profiles for the HP Latex R2000 Printer will be added to the HP Media solutions locator as and when they are tested. Our aim is to test as many profiles as we can, and the number of media profiles will continue to grow as they become available.

Is there a similar condensate collector bottle on the HP Latex R2000 Printer as in the Latex 1500 & 3000 series?

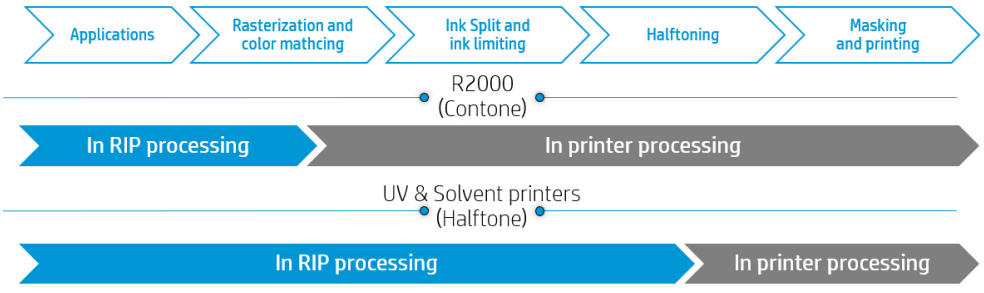
No. There is no condensate collector bottle as the water vapor extraction is managed in a different way on the HP Latex R2000 Printer.

What are the benefits of using contone vs halftone printers?

In Halftone printers, the whole color management and workflow settings are controlled by the RIP so a specific media profile has to be generated for each RIP and media print mode combination.

In Contone printers, most of the color management and workflow settings are done inside the printer as media profiles are now on board the printer. This means that the “click to print” time is significantly reduced as RIP processing is now significantly quicker.

Additionally, it is more reliable to achieve color consistency across the printer fleet.



03 DUAL CONTROL PANEL

How can I see what jobs are next in the print queue?

You can see pending jobs to be printed and the completed ones in the job queues on the Internal Print Server (IPS) or from external systems using JDF.

Can I check the status of jobs which are printing?

Yes. The HP Latex Mobile application is the easiest way to access the status of jobs printing. You can also see the complete job queues on the Internal Print Server (IPS) or from external systems using JDF. You can get the printing job status, printing progress, current printed copies and remaining time to complete a job.

Is interrupted print resume available on the HP Latex R2000 Printer for flexible?

Should an unexpected crash occur, the operator is alerted, and information is provided to indicate the point at which the printing was interrupted. The operator can then manually resume the printing.

How much storage space does the R2000 have available to save ripped jobs?

The Internal Print Server (IPS) has the capacity to store approximately 400Gb of data, including up to a maximum of 96 saved ripped jobs.

04

MEDIA LOADING, HANDLING AND SPINDLES (FLEXIBLE)

What is the minimum/maximum roll width that is supported?

The exact same specifications for the minimum width and diameters of rolls as in the HP Latex 3000 series apply. The printer supports rolls with a minimum width of 0.63m (25in).

Max width	2.500mm (98.4inch)
Min width	630mm (25inch)
Max with Media Edge Holders	2.438mm (8 feet)

Can I print roll to free fall with the HP Latex R2000 Printer without having to use the output spindle?

Yes, you can print roll to free fall as the media is now fixed to and travelling along the belt, held on by a vacuum. You can also print to free fall and connect to the output spindle for collection without having to pause printing.

Does the printer come with a media saver to save media?

There is no need for a media saver.

What is the function of a hold-down plate?

Wrinkles in the substrate can cause printhead crashes. The hold-down plate is a device to prevent such wrinkles from entering the print zone. The occurrence of wrinkles may vary from one roll to another; they can be caused by the manufacturing process or the bagginess of the substrate.

HP recommends using the hold-down plate for most flexible substrates, but particularly for the following substrate types, especially with wide rolls:

· PVC banner
· Paper
· Canvas

Which is the minimum thickness for a sheet?

The minimum thickness for a sheet is 0.8mm.

Does the R2000 support dual roll in flexible?

No. Dual roll is not a feature of the R2000.

05 MEDIA LOADING, HANDLING AND BELT (RIGID)

Which is the maximum load length/widths of material in rigid?

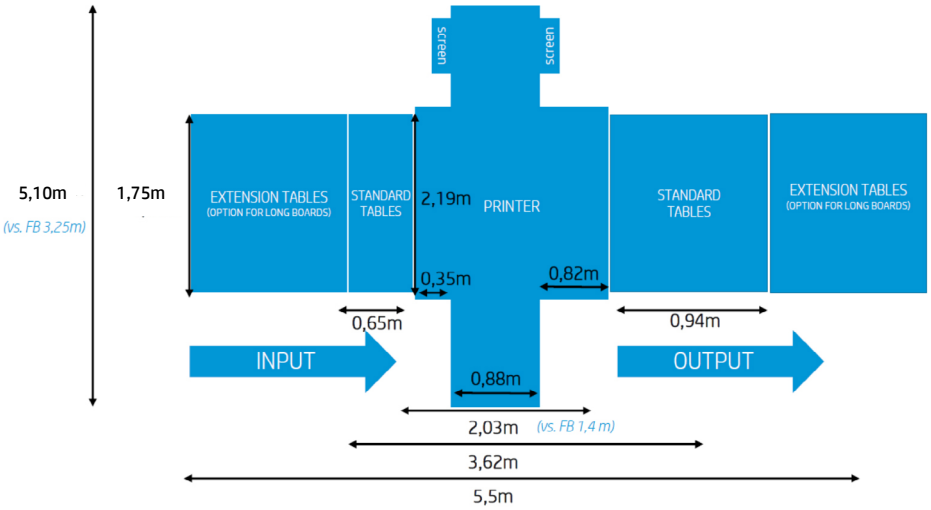
Standard input and output tables support rigid materials up to 250 x 122 cm (98.4 x 48 in). Additional extension tables are available to purchase. There are no limitations to the number of extension tables that may be used, subject to sufficient operating space being available.

Never use sheets of media that exceed the maximum published weight specification.

To reduce the risk of damage due to a head strike, do not print on media longer than the tables are designed to support.

Max width	2.500mm (98.4inch)
Min width	A3 (*)
Max with Media Edge Holders	2.438mm (8 feet)

* but, using N-ups, it can be smaller. However, the sum of all the medias has to be as big as one A3 (i.e. 2 A4, 4 A5, etc.).



One set of extension of extension tables are required to obtain maximum productivity

Are the HP Scitex FB550 and FB750 tables compatible with the R2000?

Due to the height and latch system of the R2000 tables, it is recommended that only the R2000 tables are used with the printer.

05 RIGID MEDIA

Can I load materials on to the belt with different widths at the same time?

Yes, the carriage will measure the different widths. If continuous loading functionality functionality is needed (hot loading), just place the N-UPS position markers to indicate where to place the following boards

Can I load porous rigid materials?

Yes, there is a comprehensive list of media available on the HP Media Locator page: https://www.printos.com/ml/#/homeMediaLocator.

The most common porous rigid material is compressed or corrugated cardboard. Some cardboard materials, especially uncoated ones, are porous and may absorb the ink. Use the Add new media process to increase the amount of ink or to create an underflood white printmode to boost color saturation. This may also be the case with some wood so use the RIP software's Saturated Rendering Intent option to increase saturation.

Does the belt require cleaning or other maintenance?

To prevent a build-up of ink on the belt, clean with isopropyl alcohol (IPA) and the recommended brush which is supplied with the printer. Please refer to the User Guide for detailed maintenance schedules.

Can the belt load warped or bowed media?

If the media is too warped or bowed, the vacuum belt system is unable to hold flat against the belt. It will require the use of edge leading holders or taping the substrate to the printing belt. Please note that when using edge holders or tape you will not be able to do full bleed printing.

Is my printer at risk from print head crashes if the media lifts up?

On board the carriage is a printhead protection sensor that will stop the carriage if it senses that the media has lifted. HP cannot guarantee that it will totally protect the printheads but is an excellent fail safe in the event of media lifting.

Is thermoforming supported?

Yes thanks to the flexibility of the HP latex water-based inks. There are specific print-modes with high density on the Generic Plastic Solid media profiles on the IPS for thermoforming.

06 PRINTHEADS

How does the new printhead replacement/ installation procedure work?

All color and overcoat printhead replacements now come with one standard head. This means they can be used as and when these need to be replaced. They are shipped with shipping fluid and, once replaced, the printer will automatically drain the fluid and then fill the new head with the colored or overcoat ink. The waste shipping fluid is collected in a separate small waste tank near the web wipe. The printer will then write to the chip on the printhead to tell which colours have been applied to that head. Also, sticker labels denoting the color needs to be placed on the top of the print head for easy identification.

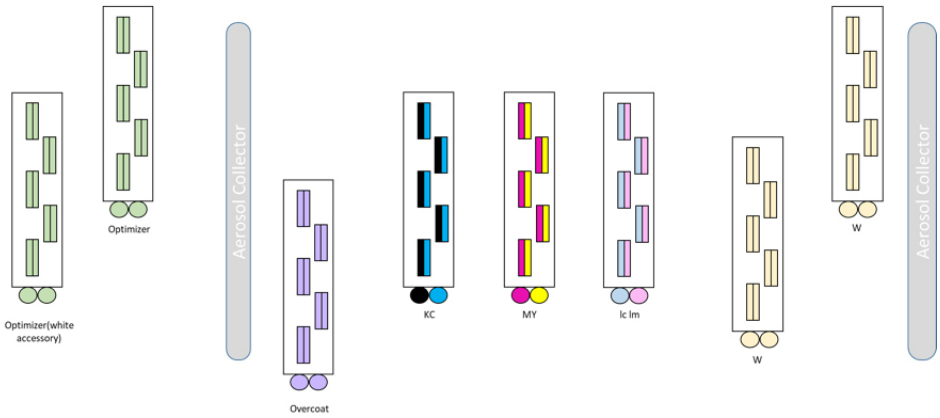
There are separate SKUs for the HP 886 Latex Optimizer Printhead and the HP 886 Latex White Ink Printhead. All printheads, except for Latex Optimizer, are delivered filled with shipping fluid. The HP 886 Latex Optimizer Printhead is shipped filled with Latex Optimizer.

Will the Latex 1500 and 3000 series have the new printheads in the future?

There is no immediate plan to change the way printheads are replaced on these models.

How many printheads are in the printer?

There are 8 printheads in total: CK, YM, LcLm, OC (new overcoat) 2x OP and 2xW.



06 PRINTHEADS

Why are there two white ink printheads?

There are 2 white printheads to support both underflood and overflood applications. The W7 printhead is used for overflood applications where colors need to be printed first and white is printed on top of it (it is printed later). The color is printed with the top part of the color printhead. Then the substrate advances and when the substrate reaches the white printhead, the white layer is printed. This is the same with the W8 printhead and underflood applications, where white is printed first. This is also why the carriage layout is as it is (the white printheads staggered). Both printheads are used in the case of spot applications.

Why is there two optimizer printheads?

The second optimizer printhead ensures that the white ink does not bleed during printing and that the ink is fixed into place when printing in overflood mode. This is all done in one single pass, hence the reason for the second optimizer to fix the white ink in place.

To understand better, this is how the ink is layered in overflood mode: Optimizer 1 for the Color Inks, then Optimizer 2 for the White ink.

When should the white printheads be placed into the offline rotating chamber?

When not in use, i.e, when printing in colors and not in white, the white printheads should be stored in the offline rotating chamber to avoid white ink waste.

How long does it take to replace a new white printhead?

The replacement procedure is exactly the same as for the color printheads. Once a brand new printhead is installed, it is important to run the printhead alignment procedure, which takes approximately 20 mins to complete.

When returning a white printhead from the offline wheel back to the carriage, do I need to run the printhead alignment calibration?

The replacement takes 3 mins in total, providing you replace the same white head to its previous position. In this case there is no need to re-run the alignment.

What is the printhead lifespan?

The printhead carries a 12 liters warranty, but an average of 25 liters is expected.

What is the warranty of the printheads?

The warranty will be 12 liters on colors Overcoat and Optimizer, same as HP Latex 1500 and 3000 Series for white PH, the warranty is 12Liters or 6 months since installation in printer.

07 INK

How many ink tanks are present on the printer?

There are 9 ink tanks in total: Cyan, Magenta, Yellow, Black, Light Cyan, Light Magenta, Optimizer, Overcoat and White.

Can I use the HP Latex 1500 5-liter inks with the R2000?

No, the ink chemistry is different, and the tanks will be chipped and keyed to prevent any mistakes from happening.

Are there any differences in the ink formulation between the R2000 inks and those of the other HP Latex series?

Yes. It is a new ink formulation, but not drastically different to the 3rd generation inks. You can expect to see slightly better results in gamut. Apart from the white ink, the only difference is that there is an extra ink called overcoat which places the protective anti scratch agent on top of the printed image.

Will there be any additional inks for different types of applications?

There will be just one full set of inks which will cover all the supported applications for the HP Latex R2000 Printer. Unlike other competitor printers, our ink is universal and will not need to be swapped out between applications.

What are the differences between the HP Latex Rigid inks and Gen3 inks?

- Lower temperature curing inks for rigid media versatility (25°C / 77°F less), same performance in flexible as Gen3.
- White ink: high opacity, fast, continuous recirculation system, offline wheel for no waste.
- New fluid: Overcoat, for configurable durability.
- New White ink: HP 886 Optimizer Latex Printheads, with micro recirculation that ensure reliability to work with HP Latex Rigid fast drying inks.
- Higher gamut: improved magenta, higher pigment load.
- Maintains all the environmental advantages from HP Latex Gen3.

With the water tank for the web wipe, how often does it need to be filled and what water should I use?

Should the water within the tank reach the minimum level, a sensor will detect this, and an alert will be displayed. Depending on the job in progress, it may be possible to continue printing. When the web wipe roll is replaced, the water tank should also be refilled.

The water in the tank should be filled with distilled water and has a capacity of 8 to 10 liters. The purpose for the water is that is used to wet the web wipe for optimal cleaning of the print heads during service and during printing.

Is there any difference between the drop size of the HP Latex Rigid inks?

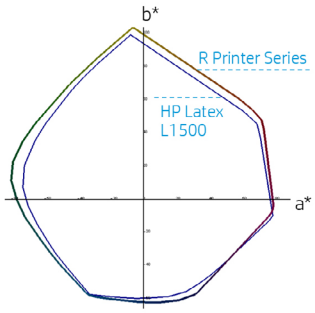
All the drop sizes are 10 picoliters, slightly smaller than Gen3 inks (12 picoliters).

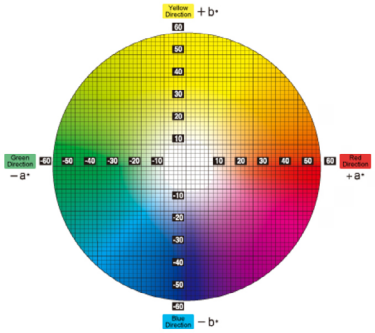
How does the gamut compare to Gen3 printer quality?

HP is always striving to improve its print quality which is already very good in the 3rd generations of printers. We do see a slight improvement of gamut in the HP Latex R2000 Printer.

Fleet management in Latex

R Printer Series have higher gamut than Gen3 latex printers





Note: Comparison done with
• Tool: Gamut Viewer with Alpha Shapes–50000
• Media: Avery MPI 3000 • Mode: 6pass 6c120%

What is the new overcoat ink?

The new overcoat ink consists of a fluid that helps to configure the durability of the rigid and flexible printing jobs to ensure good scratch resistance.

Is the Overcoat used on the printed image or across the entire material?

The Overcoat is only applied to the printed image.

Do I have the option to turn the overcoat off for certain jobs?

You have the option to be able to turn it off, specially recommended when laminating to ensure having the best adhesion to the laminant and to improve the cost per copy.

What is the shelf life of the inks?

The shelf life of the colored and transparent inks is 18 months from the date of ink manufacture.

Can I print with white ink on vinyl for vehicle graphics?

Yes, you can. HP Latex white ink does have a good elasticity for vehicle graphics.

How long do the colors take to fade for both indoor and outdoor applications

Light-fade resistance	Outdoor[1], no lamination	Outdoor[1], with lamination (film)	Indoor in window[2], no lamination	Indoor away from direct sunlight, no lamination
Self-adhesive vinyl	up to 4 yrs	up to 6 yrs	up to 6 yrs	up to 130 yrs
Acrylic (Plexiglass)	up to 2,5 yrs	-	up to 3,5 yrs	up to 98 yrs
Polycarbonate	up to 2,5 yrs	-	up to 3 yrs	up to 103 yrs
Aluminum composite (Dibond)	up to 4,5 yrs	-	up to 7 yrs	up to 148 yrs
Fluted Polypropylene (PP)	up to 2 yrs	-	-	-

What is the stretchability of the inks in deformable medias?

On self-adhesive vinyl we recommend a maximum stretchability of 30% (with less than 2 dE76). If we stretch up to 60% we will have around 6dE (depending on colors).

What is the durability of the printed jobs and their inks when exposed to high temperatures?

We have heated printed samples for thermoforming up to 250º C /482 ºF without noticing any ink degradation.

Can a non-laminated printed job be used under water? Does water affect the HP Latex Rigid inks?

It greatly depends on the media. Some substrates such as SAV can be used under water but it is recommended to laminate in order to provide extra durability. Internal HP tests are performed to ensure durability against water rubbing. However, immersion performance is not guaranteed.

Can printed jobs with HP Latex Rigid inks be welded?

It depends on welding technology, ink and substrate type:

- Heat weld: yes, but the weld strength over printed images decreases versus welding over unprinted zones (for PVC, PE and some textiles using tape).
- Hot air: yes, but the weld strength over printed images decreases versus welding over unprinted zones (for PVC, PE and some textiles using tape).
- Thermal impulse (pulsing energy): yes (for PVC, PE and some textiles using tape).
- High Frequency: not compatible if using black ink (due to conductive pigment) (for PVC, PE and PP).

White ink

What is macro-recirculation?

Macro recirculation is the process of pumping white ink through the components of the White Latex Ink delivery system while the printheads are idle, between the Intermediate Tank and supplies “A” and “B”, through the White Printheads or Auxiliary White Printheads, and through the ink supply tubes.

The basic components of the White Latex Ink delivery system are separate from the color inks and are factory-installed.

The White Ink Supply Module operates automatically in several modes: Printing, Refill and Recirculation while idle.

What is micro-recirculation?

Micro-recirculation ensures that the ink is kept in print-ready condition within the printhead prior to printing and in-between jobs to ensure that the pigments do not settle. Micro-recirculation happens in the print reservoir, which is inside the printhead, before reaching the resistor chambers for ejection.

What is the offline rotating chamber?

The offline rotation chamber provides gentle agitation of ink inside the white printheads to prevent sedimentation by automatically rotating 190 degrees for a few seconds once every 20 minutes.

This solution ensures the minimum of energy consumption and the ink is easily stored and installed when required.

Why does the white ink need macro-recirculation?

This is needed to prevent the settling of the pigment as it is denser than other inks and requires continual movement, so it can provide instant use when needed to do so.

Given the constant movement of the white inks, will the intermediate tanks for white need to be replaced more often than color? How often do we see them needing to be replaced?

The white intermediate tank should be replaced every 4 months. The replacement will be done by the user that will be alerted through a maintenance.

12 intermediate tanks are included in the white inbox accessory (inside a box called White Maintenance Kit). This covers all replacements required for 4 years.

When replacing the white intermediate tank (IT), there is no ink wasting (the ink is moved from the IT to the ink cartridge prior to the IT replacement).

What happens if I use an out of warranty date HP Latex white cartridge?

The printer will give a warning, but if the customer actively accepts the risk, the printer will acknowledge the cartridge and accept it. If the warranty expires whilst the ink cartridge is in the printer, it is recommended that the cartridge is replaced together with the associated intermediate tanks and printheads. If expired ink is used, the PH will automatically lose the warranty.

What is the elasticity of the white ink like, is it the same as the colors?

There are no differences with the elasticity of the white ink and the colored ink.

What is the shelf life of the white ink?

The shelf life of the white ink is 12 months from the date of ink manufacture.

When going without printing in white for an extended period of time, is it possible to purge the white system? How is it done?

Yes, using the Flushing white ink service operation. Although the white is not used, the white system is still working and without waste, thanks to the circulation through the Auxiliary White Printheads and the rest of the printer system.

In case of performing a Flush, the printer shows “No white”. Therefore, the rotation chamber will not work either.

If you wish to print with white ink again, is it necessary to perform another Service assistance, to purge the white ink.

Is there any special action required when not printing in white?

When not printing in white, the operator should move the white printhead to the offline rotating chamber to prevent waste.

Does the HP Latex R2000 support 3 and 5 layer mode?

Yes, R2000 support 3 layer and 5 layer modes for differnet applications: 3 layer for dual sided transludent and DSDN; whilst 5 layers is used for blockout dual sided

HP Latex R2000 White Print Modes – MR4

Metric system

White Ink Density	UNDERFLOOD	OVERFLOOD	SPOT	3 LAYER	5 LAYER
60%	26 m²/h	25 m²/h	49 m²/h	New! 29p 60% white 9 m²/h	4,1 m²/h
100%	16 m²/h	16 m²/h	37 m²/h		
160%	10 m²/h	10 m²/h	23 m²/h	*50p 130% white* 5,3 m²/h	
260%	8 m²/h	8 m²/h	14 m²/h		

*Print speed may vary due to the adaptive printing servicing to avoid image quality defects, a max of 15% reduction impact in specific conditions.

Are there any other special maintenance requirements related to the white ink, other than the offline rotation chamber?

No other special short-term maintenance is required. The white ink is automatically managed and maintained, both by macro/micro circulation and the off line rotating chamber. The only other consideration would be, on average every 4 years a special white ink maintenance service is required.

Installation
Printing, speed
Control panel
Flexible media
Rigid media
Printheads
Ink
Color
Accessories
Service / support
Production software
R-Series

08 PRINT QUALITY AND COLOR PERFORMANCE

What is the thickness of the ink layer compared to UV?

The HP Latex water-based ink layer is very thin, in fact it will be one of the thinnest in the market at only 6-8 microns. Compared to UV which is on average 25-30 microns you will see two noticeable quality differences. Firstly, as there is no UV curing you will not see any gloss banding. Secondly it will preserve the natural attributes on the substrate, especially in higher end applications like wood and aluminum.

Does HP Latex R2000 offer various substrate warranties (e.g. the 3M™ MCS™ and Avery warranty)?

Rseries is certified on 3M tm MCS tm and Avery ICS warranty program as current HP latex portfolio. For specific warraties on each region, please check these vendors warranty details.

Does the new 3M road signage warranty apply to the R2000?

Currently, the road signage 3M MCS Warranty for Traffic is only supported on the HP Latex 360/365 printers. Please see the HP Latex website or HP Latex knowledge center for more details.

What are the key differences between using 4 color and 6 color on the HP Latex R2000?

Printing with 4 colors (better for ink efficiency) uses less ink and is suited to situations where image definition is less of a requirement. Printing with 6 colors delivers better image quality, especially in light color transitions. For example, better definition in skin tone areas.

How does the gamut improve when using white inks?

Latex-based white ink has better gamut than UV and a vivid appearance compared to UV matte finish. Smooth thin latex ink layer preserves media properties and provides higher opacity white, with a unique automatic, low waste solution and maintain high image quality over the life of the printer with user-replaceable HP Thermal Inkjet Printheads.

Is it possible to print 3 or 5 layer sandwich mode in white for flexible substrate applications?

Yes, R2000 support 3 layer and 5 layer modes for different applications: 3 layer for dual sided translucent and DSDN; whilst 5 layers is used for blockout dual sided.

09 VALUE ACCESSORIES

What accessories are available for the HP Latex R2000 Printer?

- Extension tables
- Edge holders

Can I use the table top roll holder from the FBs in the HP Latex R2000?

Yes, it's a compatible accessory.

How many loading tables can be concatenated for rigid printing?

There are 2 robust loading tables, one each side of the printer. Standard input and output tables support rigid materials up to 250x122cm (98.4x48in). Two sets of optional Extension Tables (94cm in length) support rigid materials up to 250x305cm (98.4x120in). Maximum rigid sheet weight up to 68kg (150lb).

There are no limitations to the number of extension tables that may be used, subject to sufficient operating space being available.

10 MAINTENANCE, SERVICE AND SUPPORT

What are the SMK (service maintenance kit) intervals?

Refer to the illustrations of the prevoius question to see the SMK intervals.

What kind of support will be available, 24/hr 7 days per week, same day, etc.?

On site, next business day support is offered depending on the contract. There is no 24hr support line.

Will there be same day repair and cost?

No. Next business day repair is usually offered depending on the contract.

If I don't use the maintenance kits, will it have an impact on my warranty?

Yes. Please read the Warranty statement.

I have my own engineering staff. Can they be trained and given access to parts so that I can be self-supporting?

Yes. As part of the new service model, HP have developed specific training modules to train the customer to perform break and fix (Training level 3). Please contact HP direct support or your Reseller for more information.

What is the maximum capacity to expect of the HP Latex R2000?

It can absorb peaks of up to 335,000 sqm/month (41,860 sqft/month) but repeating monthly production at this volume is not recommended and may require additional maintenance.

What is the intended lifespan of the mesh belt?

The mesh belt is designed to last the lifetime of the printer, and therefore the requirement to replace the belt is not expected. However, this expected lifespan excludes any damage caused by inappropriate actions, e.g. misuse of cutters or other sharp tools, or accidental damage.)

How is the mesh belt cleaned?

The mesh belt should be cleaned as part of the routine maintenance schedule, removing any dirt where visible. Additionally, functionality has been introduced to reduce the build-up of dirt.

How is the mesh belt changed? And how long does it take to carry out the change?

A qualified service engineer will change the mesh belt in less than 90 minutes. The tension of the belt is removed by adjusting both the side and mid supports using an electrical screwdriver. The belt is then removed by hand and the new one fitted. The tension of the belt is then adjusted accordingly.

11 PRODUCTION SOFTWARE, PRINT OS AND HP LATEX MOBILE APP

What is HP PrintOS?

HP PrintOS is a print production operating system with applications that help businesses get more out of their HP presses and printers, by simplifying and automating their production processes. Please see the following link for further details:
http://www8.hp.com/us/en/commercial-printers/floater/printos.html

Can I change the operating system of the IPS and what operating system is it compatible with?

The operating system for the IPS is Windows 10 embedded standard edition. The IPS is not compatible with any another operating system.

Are there any additional JDF capabilities in the HP Latex R2000?

Yes. The new HP Latex R2000 Printer is able to have synchronized control of the job queue between RIP and HP IPS:

- Job submission through JMF.
- Remote queue management through JMF.
- JDF improvements for subscription robustness (KnownSubscriptions and StopPersistentChannel).

If I want to implement my own JDF Solution, where I can get information about possible JDF commands on the Printer?

HP offers the JDF Interface to implement your integrated JDF Solution through a web portal, Solutions Partner Portal.

To register for access to this portal, please go to https://developers.hp.com/lfp-enroll. For further information, please contact our support team by sending an email to bcd_isv@hp.com.

How do I integrate my HP Latex R2000 Printer with the RIP via JDF?

ONYX and CALDERA RIPs can take advantage of the JDF interface in the printer by selecting the option on the printer driver setup. Please see the Installation Guide on how to activate the JDF interface on the RIP. Once the JDF interface is activated, the RIP will display printer status and notifications together with job status, job ink and media consumption.

For other RIP partners, customers should contact these companies directly for more information on how to activate the integration.

How do I integrate my HP Latex R2000 Printer with an MIS System via JDF?

The printer implements a subset of JDF messages following the standard JDF 1.5 language. External applications can retrieve printer status and notifications together with job status, job ink and media consumption using this standard.

Customers should contact their MIS provider directly for more information on how to integrate it. MIS companies or partners that would like to integrate the printer with their solution can get the complete information of the supported JDF interface from the HP Solutions Programs Portal (https://developers.hp.com/lfp). If it is the first time you access to HP Developers for Large Format Printers, register yourself at https://developers.hp.com/lfp-enroll.

Will the HP Latex Print OS Mobile App support the HP Latex R2000 at introduction?

Yes. Both apps will be available at Google Play and IOS App Store.

Can I control the printer with the HP Latex Mobile App?

No. The HP Latex Mobile App only monitors the printer status. It can't perform any actions on the printer.

Does the HP Latex Mobile App replace information on the Embedded Web Server (EWS)?

All information found on the HP Latex Mobile App can be found in the EWS.

EWS still enables you to enter costings to pull accountancy reports on production which is not currently available via the App.

What are the main differences between the R1000 and R2000 printers?

		R1000	R2000
RIGID	Max width	1.63m / 64"	2.50m / 98.4"
FLEXIBLE	Max width	1.63m / 64"	2.5m/98.4"
	Max roll weight	68kg/150lb	100kg/220.4lb
VACUUM	Nº of zones	3	14
	Vacuum power	Installed power 3x360W: 3x (1300Pa, 13mbar = 132mmH2O = 5.2lnH2O)	
PRODUCTIVITY	Indoor Production (6p 100%)	29 sqm/h - 312 sqft/h	44 sqm/h - 473 sqft/h
	Outdoor (3p 70% - 80%)	60 sqm/h - 646 sqft/h	87 sqm/h - 936 sqft/h
COST PER COPY	Cartridge size	3 liter-cartridges	5 liter and 3 liter cartridges except white cartridge which, currently, is only available in 3 liter
ENERGY CONSUMPTION		8-10 kw	10-12 kw
DIMENSIONS	Printer	4.21x2.04x1.75m (165.7x80.3x68.9in)	5.10x2.04x1.75m (200.7x80.3x68.9in)
	Including standard tables	4.21x3.64x1.75m (165.7x143.3x68.9in)	5.10x3.64x1.75m (200.7x143.3x68.9in)

How can I identify better by customer type and need, the R-series printer that better fits a customer´s business?

	R1000	Needs	R2000	Needs
Customer Type	Photolabs	Serving demanding campaigns, creating customized solutions	Large signage PSP	Fast growing online B2C business digital native, consumer photo driven (canvas, wallpaper, memories...)
	Exhibition builders	Differentiate themselves by creativity, quality and service. Many rigid materials open new creativity opportunities		Competitive advantage based on scale and catalogue of standarized products
	POS specialists	Sophisticated retail, events & exhibitions, outdoor main apps, mixing flexible & rigid		Dedicated printers per application, usually fleets 2-3 shifts, sustained 24/7 peaks