HP Latex 310/330/360 Printers Frequently Asked Questions

This document addresses the questions most frequently asked about the new HP Latex 300 Printer. It complements information provided in sales training material.

Table of contents

Learn more at

hp.com/go/Latex360

May 2013

Learn more at

hp.com/go/Latex360

May 2013

Learn more at

hp.com/go/Latex360

May 2013

Learn more at

hp.com/go/Latex360

May 2013

Printing

Q With no optical media advance sensor in the 310 and 330 models, does this mean there is more chance of banding?

Firstly, there is no difference in print quality in the 310 and 330 compared to the 360. As we do not have a heater in the printzone, media expansion in that area is significantly reduced which means a more stable media advance allowing HP Latex 310/330 to print robust quality without the OMAS. Additionally the HP Latex Optimizer helps pigments to instantly fix on the media substrate avoiding quality artifacts caused by a slower curing.

With the HP Latex 310 and 330 It is always recommended to perform the media advance calibration once a new media profile is created. Recalibration may be needed occasionally after some usage, to adjust to the dynamics of the environment and the media intrinsic variability. If you do experience any problems during printing you can always change on the fly, the advance factor and or inter-pass delay offset in the front panel.

The OMAS in the HP Latex 360 Printer is needed for two reasons:

- With the high print speeds of the 360 it helps to ensure accuracy in longer advances.
- To read the markings for double sided printing.

Q What is the difference between halftone and contone printing?

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.

Q Is there any disadvantages going from a halftone to contone printing?

The user won’t be able to select full to light color ink separations to tradeoff between image quality and print cost. However to solve this the user can using only four colors with any number of passes.

Q Can I make any changes on the fly while printing?

Yes. The most popular adjustment you can make while printing is to change the curing temperature and it will take immediate effect while printing the current print job. There is an option to save the change and these settings will be automatically saved to the profile for subsequent jobs. In this menu you can also make changes to advance factor, inter-pass delay offset and vacuum printing, however these are only recommend for experienced users.

Q Where does the curing temperature reading come from?

The temperature is taken from the inside the curing zone. There are several curing modules, each with their own temperature sensor that work together to create a consistent and uniform curing temperature across the substrate. This is due to a pressurized environment where hot air is forced through hundreds of small nozzles to cure the print and then recycled back through the system to remain efficient.

There are two main advantages of curing by using heated air:

- The curing modules can get up to temperature very quickly in under 1.5 minutes
- Curing is now done at a lower temperatures and over a shorter time which means printing at higher speeds and lower energy consumption.

Learn more at

hp.com/go/Latex360

May 2013

Q Is there a problem with curing media at the edges of the roll?

The new curing modules have a consistent temperature across the zone which means there is much better performance and you should not expect any problems with curing on the edges of the media.

Q What is the printer's robustness like, does it move around when printing?

The printer is very stable during printing and is reinforced with cross bars to prevent any unnecessary movement. If there is any minor inertia, this has no found effect on printing quality.

Q What is the lowest and cheapest economy mode I can use for banners? Is it possible to use 2 pass?

This all depends on the viewing distance and what is acceptable by the end customer. The HP Latex 360 Printer can reach a maximum speed of 1 pass. However for final production on outdoor applications on banner medias it is recommended to use a minimum of 4 to 6 passes. A full list of print modes are available in the data sheets or quick demo guides with recommended viewing distances.

Q Can I print borderless posters (full bleed printing)?

Borderless printing is not recommended by the any of the HP Latex 300 Printer. It is up to the customers own discretion if they wish to print borderless using the ink collector kit on the HP Latex 360 Printer.

Q On tiled jobs can I print edge to edge without having to cut the panels for installation for edge to edge (butt) joining?

No, this method of printing is not supported by the HP Latex 360 Printer as the image is slightly over printed so it would not work for tiling without cutting.

Q Can I print completely unattended if I have a take up roll on my printer?

Yes. The printers can run completely on their own to complete a full roll of media reel to reel. All that you would need to ensure is that you have enough consumables to last the print job.

Q What substrates can the cutter trim?

The HP Latex 360 Printer is fitted with an on-board x axis cutter. There is a list of substrates that can be cut in the user guide. The cutter can trim all papers, self-adhesive vinyls and backlits. Banners and textiles cannot be cut and will require manual trimming.

Q How long does the printer take to start printing (wake up/warm up times)?

The following are the time combinations to ready mode:

- Warm up: 1.5 minutes
- Wake up and warm up: 3 minutes
- Cold start (printer switched off) and warm up: 7 minutes

Learn more at

hp.com/go/Latex360

May 2013

Power

Q Why can't the 330 or 360 run with domestic plugs?

The 310 was designed to be a compact printer that fitted into a small shop environment with no special installation or dedicated power line, hence the ability for it to work with regular power sockets that can operate between 200 to 240v range (13A min). To achieve the higher print speeds of the HP Latex 360 Printer and the wider curing area of both 330 and 360 it was necessary to have the higher power rating of 16A which requires the industrial socket or Nema 6-20 (250v/ 20A) connection.

Q Can all countries support the HP Latex 310 printer plugs?

Listed below are countries that run domestic power in the range of 100- 127V. However it is likely that in shop/factory environments these customers will have NEMA 6-20 (250V /20A) connections that can support the power range of 200-240V (13A min) required by the HP Latex 310 Printer.

US/Canada

Mexico

Brazil (some locations)

India

Taiwan

Japan

Q What is the average power consumption during printing?

Based on a print mode of 8p6c this is the power consumption per model

HP Latex 310- 2.2kw

HP Latex 330- 2.6kw

HP Latex 360- 4.6kw.

Q With the very quick warm-up time what is the effect on energy consumption?

The maximum power consumption per printer during warm up phase will be:

HP Latex 310- 2.6kw

HP Latex 330- 3.2kw

HP Latex 360- 6.4kw

Q What is the energy consumption in sleep mode?

For all models the printers consume less than 2.5W while in sleep mode.

Learn more at

hp.com/go/Latex360

May 2013

Spindles and media loading

Q What is the minimum substrate width I can use?

For all models it is 254mm (10in). Please note that the minimum travel width of the carriage will be 54in for all substrates under this size.

Q When should I consider using the edge holders, can I print without them?

In most cases the vacuum on the platen or the tension from take up reel is sufficient enough to print without the use of edge holders. Edge holders are a tool to help protect the printheads from any unforeseen damage, like printhead crashes that may occur from certain media types that have the tendency to curl at the edges while printing. Examples of this type of behaviour can happen in certain papers, or textiles with rugged edges. If at any stage during the printing process you wish to enable the edge holders, just open the window and slide them into place. Once you close the window, printing will resume without having to resent the job. Edge holders can also be used when printing with the ink collector kit.

Q Can I use the take up reel without the tension bar?

No. The tension bar must be used at all times when printing with the take up reel. It is there to help prevent any telescoping and to assist in accurate tension.

Q Are the two spindles identical so I can use them double sided printing by just swapping them around?

Yes. They are completely identical.

Q Can I attach media to the take up reel while printing to maximize media coverage

Yes. All you need to do is attach the media to the core and enable the appropriate take up reel winding direction. This will save you approximately 1.5m (4.9 ft.) of media.

Q What is the maximum media thickness that the printer can accommodate?

The maximum tested thickness is 0.5mm.

Q Are the heavy duty spindles for the HP Latex 360 compatible with the HP Latex 330?

Yes. They can be purchased as an accessory.

Q Is the take up reel an upgrade option with the HP Latex 310 model?

Yes. The 54in take up reel can be purchased as an accessory.

Learn more at

hp.com/go/Latex360

May 2013

Ink Collector kit and printing porous textiles

Q Can I print porous substrates on the HP Latex 310 or HP Latex 330?

The HP Latex 360 Ink Collector kit cannot be retrofitted to the other models to print on porous textiles. However there are textiles available on the market with a backing liner which allows you to print without the use of an ink collector kit. Please consult the HP media Solutions Locator for supported media.

Q When printing with the ink collector in place, can I print without the take up reel?

No. There is no vacuum pressure to hold the media to the platen when the ink collector kit is installed. Tension must be created by attaching the substrate to the take up reel in order to prevent any damage to the carriage or printheads.

Q Does the HP Latex 360 know if the platen is loaded or the ink collector is loaded?

Yes you will see a notification on the front panel in the media menu however it does not prompt you if you are printing on non-porous substrates.

Q How long will the ink collector kit last?

It all depends on the porosity of the textile being printed and the number of passes. Based on a worst case scenario of printing with mesh, it is recommended to replace the HP Latex 360 Ink Collector foam inserts after one complete roll of 30 meters has been printed.

Front Panel and substrate presets

Q How do I search for a media pre-set if it is not available on the printer's front panel?

You have several options available to search for HP or 3rd party substrate brands:

1. Search online from the front panel which connects directly to the HP Media Solutions Locator database. Here you can download and install a substrate to the printer.
2. Use the printers embedded web server on the RIP work station to import a substrate pre-set from the HP Media Solutions Locator which will then update and install it on the printer.
3. Download the pre-set directly from HP Media Solutions Locator and then install the pre-set on your RIP software. Please be aware that any 3rd party media profiles downloaded outside of the HP Media Solutions Locator may not sync with the printer if they are not digitally signed.

Q Do all the front panel menus on the HP Latex 300 family have the same features?

Yes. With the 4.3 inch menus all you need to do is to swipe or scroll the screen to see the full menu options.

Q Can I run help videos on the front panel instead of the QR codes?

All help videos that are associated to the QR codes must be watched from a smart phone or tablet as there is no ability to switch between watching the video and performing the action on the front panel at the same time. Below each QR code in

Learn more at

hp.com/go/Latex360

May 2013

the printer menu is the full written explanation what is covered in the video. In addition there are useful "show me how" wizards on the front panel to demonstrate several basic printer tasks, for example how to load a substrate.

Q Can I export a media pre-set from a HP Latex 360 Printer to a HP Latex 310 or 330?

Yes. The HP Embedded Web Server also allows you to export substrate presets from your printer for use with another printer of the same model.

Q How can I keep my printer firmware up to date to take advantage of new features and functionality?

By default the printer is set to automatically download firmware updates. You may change this setting to search manually for updates. You will always get a notification if you wish to install the software and it will not be automatically installed.

Q Is the front panel localized into different languages apart from English?

Yes, it is localized into French, Italian, German, Spanish, Portuguese, Japanese, Chinese Simplified, Chinese Traditional, Korean, Russian and Catalan.

Ink and printheads

Q If I only want to use 4-color print modes, can I choose to not install the light ink cartridges to save money?

No. The light ink cartridges must be installed in this printer for the system to function properly as designed

Q What is the warranty and average expected usage of the HP 831Latex Printheads?

The warranty on the printheads is 1 litre and are expected average is 4 litres.

Q Mimaki, Roland and Mutoh printers where we are offered an extra warranty on the print head when 3rd party inks are used, can we do this with the latex 300 to save on costs?

No. It is not recommended to use any third party inks as the ink and the printheads are developed together to produce the best print results.

Q Is there any sensor to prevent print head crashes?

Printhead crashes can be avoided by using the edge holders at all times. In addition, as a safety precaution a slow scan is performed by the carriage before the start of each print job.

Q Will you be introducing any more ink colors or metallic ink to your range?

The color gamut provided with HP Latex 3rd Generation inks is wide enough to cover the needs for signage applications. Special colors like gray are not required as the internal color calibration and color management is capable to balance color inks to provide neutral grays, nevertheless HP 3rd generation inks are recognized with gray neutrality with good results

Learn more at

hp.com/go/Latex360

May 2013

when printing black on white. If you are looking for high quality photo or fine art applications it is recommended to consider the HP Designjet Z series range of printers.

Metallic inks are for some niche applications with normally very low usage, and requires extra maintenance, which makes this type of application really expensive. On top of that, the shiny effect that you can get with metallic inks is significantly lost when you laminate the prints and you have to do so because metallic inks are very sensitive to smudging and scratching.

Q Are the ink cartridges hot swappable while printing?

If an ink supply runs out during printing the printer will pause the print job and display an alert on the front panel. You will have 30 minutes to install a new supply and will not have to reprint the same job if you replenish within this time frame.

Q Why Latex does not need a lower drop size?

The main reason is that HP Latex technology uses the light inks (lc & lm). This means that dot visibility is comparable to what you can get with lower drop size and dark inks, as most of our competitors are CMYK only.

Q Why latex has 1200 dpi while solvent have 1440dpi

HP 831 Latex Printheads are native 1200 dpi, in fact solvent printheads are only 180 or 360 dpi maximum. In order to achieve the 1440 dpi competitors need to use software to interlace passes to form a grid of that resolution. This process can only be achieved with perfect substrate advance accuracy and is very difficult to manage. Considering they do not have an optical movement advance sensor it is not always guaranteed that 1440 dpi is being achieved all the time.

Latex Optimizer

Q What does the HP Latex Optimizer do?

HP Latex Optimizer enables high quality at high speed. HP Latex Optimizer consists of positively-charged (cationic) polymers suspended in a colorless, water-based ink vehicle. It reacts with the ink pigments which are negatively-charged (anionic) to rapidly immobilize them on the print surface. This produces sharp text and image detail by suppressing feathering and color bleed especially at high productivity levels.

HP Latex Optimizer also enables the drying and curing process of the HP Latex Inks to operate at lower temperature and to be more energy efficient, which has the additional benefits of allowing wide media support and reduced power consumption.

Q Does it cost more to print with latex optimizer?

Typical HP Latex Optimizer usage is around 12% of total fluid (ink + optimizer) usage.

The use of optimizer allows the colored inks to be used more sparingly, and as a result the use of optimizer has no impact on overall print costs. Results show that the total amount of ink fluid is the same and is not incremental.

Learn more at

hp.com/go/Latex360

May 2013

Q How do I know how much ink optimizer should be used and can I adjust the levels manually

The correct use of optimizer depends on the media, speed and amount of ink. In a halftone printer, the RIP would have had to choose the optimizer levels many times by trial and error. With contone printing the printer knows the exact levels of optimizer to ensure the best levels of image quality. HP Latex Optimizer is an integral part of the printing system and ink set design. Using the correct amount of optimizer will provide optimal IQ at the high speeds that the printer is capable of. Underusing optimizer is likely to result in poor IQ (high levels of ink bleed and feathering). Optimizer level can be adjusted by the user but we only recommend this this more experienced users.

Q What are the environmental characteristics of HP Latex Optimizer?

HP Latex Optimizer has the same environmental characteristics as the 6 color inks.

- Water-based HP Latex Inks – no special ventilation, no hazard warning labels, no HAPs, nickel-free.
- HP Latex Inks are UL ECOLOGO and GREENGUARD Children & Schools Certified.
- Prints meet AgBB criteria and are rated A+ according to Émissions dans l'air intérieur.

Media

Q We currently use cheap banner media, do you have a list of these that you have tested and that is compatible with the Latex 300?

HP continually updates the HP media solutions database with ongoing testing of new media. If you use a media that is not in the database you may create a new or clone a generic profile from the substrate library. Then use the on board print saturation test together with adjusting curing levels to see what best result you can achieve for that specific media.

Q What about printing banners with high levels of plasticizers, is it any different on the Latex 300 Printer series

Printing performance will always be affected when printing with banners with plasticizers, even in solvent printing technologies, however with a lesser effect than HP Latex. Media suppliers are constantly looking at ways of improving their composition to make the interaction with their media easier for better results. We currently experience similar performance to the HP 260 and HP 280 Latex printers.

Q How many media profiles can I find on the media solutions locator?

Approximately 250 will be available and intend to add more as they are tested. Note that those profiles will be usable for any RIP due to printer being contone

Q Will we have 3M matched components system (MCS)?

No, not at the time of introduction.

Learn more at

hp.com/go/Latex360

May 2013

Q Will we experience any deformation/smiling effect on the media?

In very exceptional cases you may find deformation but with the new efficient curing system you should find very good results, good enough to perform contour cutting.

Color management

Q How long will it take to make a profile with the three models, is there any difference in time?

To create a media profile it will take up to 30 minutes which will include a color calibration, but not an ICC profile in the case of the HP Latex 310 and HP Latex 330. If you wish to include ICC profiling in the case of the HP Latex 360 it will take an additional 20 minutes.

Q With no spectrophotometer on the HP Latex 310 and 330 how do I do perform ICC color profiling if I want accurate colors.

The first step is to ensure you have performed the internal color calibration on the media, if you require consistency over time. Then you can perform an external ICC profile, either from your RIP (if supported) or from any other color profiler you may have, measure the colors and input the values into your profiler. Please note that the RIP won't sync with the HP Latex 300 internal profile menu as they are not digitally signed.

Q I have had curing problems with flat colors in the past like greens, browns and purples. What can I do to prevent this?

There has been reports of problems like these on previous generations of Latex printers however during testing on the HP Latex 300 printers we have not found any problems with these tints when using the published profiles.

Q Is there an emulation mode for other HP Latex printers

An "emulation mode" is currently not offered. Offline color calibration solutions are offered by HP partners (e.g. GMG). HP has produced a basic guide, however if you require further assistance please contact your reseller color expert who can help you with the emulation process.

Q Can the Spectrophotometer become inaccurate over a period of time?

There should not be any decline of accuracy in Spectrophotometer performance over a period of time as this has been rigorously tested by HP and I1.The unit is very reliable and before each scan it performs a self-calibration on an internal target inside the sensor.

Q How often do you need to perform closed loop color calibration (CLC)

CLC should be performed after changing one or more printheads, or after printheads start to wear out, normally when they are over their average life expectancy (see Ink and printheads section). The printer is automatically updating a CLC Status flag by substrate, to advise on the necessity of performing color calibration. Whenever the CLC status is completed, there is no need to perform color calibration on that substrate.

Learn more at

hp.com/go/Latex360

May 2013

Q What is the difference between the spectrophotometer on the HP Latex 260 and the HP Latex 300

The spectrophotometer is exactly the same model between the two families of printers

Q When creating media profiles can I select the amount of patches printed for the test?

The number of patches is fixed for internal ICC profiling with the embedded spectrophotometer. In case the user wants to create an ICC profile with a higher number patches they have the possibility to do it from the RIP, The user then sends the patch plot to the printer and measures it with the embedded spectrophotometer or any other external device.

Q What type of dithering was used with the test image when creating a new media?

We do an advanced type of error diffusion. Settings have been adjusted by HP color engineers to optimize the image quality with the latex inks. This dithering method requires dedicated electronics like an ASIC (Application-Specific Integrated Circuit) and cannot be done by software as it would not support the processing speeds required in a production environment.

Q With no spectrophotometer in the HP Latex 310 and 330 models, will there be a higher likelihood of color inconsistency?

There is another sensor on the carriage of all the three models called the line sensor which measures for color consistency on the HP Latex 310 and 330. However the main contributing factor to excellent consistency is the lower operating temperature of the 3rd generation printheads and lower printzone temperature which ensures a consistent and accurate drop ejection resulting in consistency across print jobs to a level of 2dE 2000 for 95% of colors.

An additional advantage of having the spectrophotometer is that you can get consistency between HP Latex 360 printers also to a level of 2dE200 on 95% of colors.

Q Is SAI a HP developed RIP and how will it be support by HP?

SAi FlexiPRINT is developed by SAi in close cooperation with HP based on SAi's well-known product FlexiPRINT. The SAi FlexiPRINT Basic Edition is bundled with each HP Latex 310 and HP Latex 330 printer and will be fully supported by HP.

Q Why does the HP Latex 360 not come with a RIP in the box?

The market that the 360 is targeted will normally already have a RIP solution in place, hence the decision not to include it in the package.

Q Do all RIP's that support the 300 series synchronise substrate pre-sets in the same way?

Top branded RIP vendors already certified to use the HP latex 300 family of printers. They will all have their own process of synchronization. HP is creating a "how to" document for synchronization and will be available shortly.

Learn more at

hp.com/go/Latex360

May 2013

Q I have a contour cutter, does the included basic RIP support these cutter marks

The SAi Felxiprint HP Basic Edition does not include the cutter marks. Customers have the option to upgrade to the SAI Premium version which supports contour cutting. Alternatively Graphtec or Summa offer cutter plug-ins for Adobe Illustrator to insert cutter marks.

Maintenance, diagnostics, service & support

Q Is there a daily maintenance routine that needs to be run before printing, and if so how long does it take?

No. There is no daily routine maintenance. The maintenance routine will be automatically adjusted depending on how long has been the printer idle. If the printer is not used more than once per week, printhead servicing will take between 30 seconds to 1.5 minutes. Before a print job the printer checks for nozzle health and depending on the result the printer may need to perform additional auto recovery which is 1.9 min.

Q How much ink is used during servicing?

If the printheads are in a reasonable condition servicing will use a very minimal amount of ink. The worst case scenario would range from 0.064g to a maximum of 0.980g per affected color.

Q How long does the HP 831 Latex Maintenance Cartridge last?

Based on average operating conditions the maintenance cartridge should last for up to14 litres of ink consumed. This ranges between 2.9 litres to 3.6 litres per month, meaning that the cartridge needs to replace every 3 to 5 months based on average usage.

Q What are the service intervals for the latex 300 family? How often does a service technician need to visit or can it be done ourselves?

Approximately every 110 liters there's a service visit. Depending on the total usage and subsystem cycles, the intervention requires different service maintenance kits that can occur every 12 to 18 months and should take the technician 2.5 hours to complete.

There is one service routine that is carried out by the user which involves a simple lubrication task of the carriage rod every 300 000 scan axis cycles. Based on a usage of 500sqm per month this would occur once every 4 months.

Then there is three different service intervals carried out by technicians:

SMK3 every 110 liters or 3000 Km of scan axis (based on 500 sqm/month it would occur every 1.5 years)

SMK1 every 4 million scan axis cycles (based on 500 sqm/month it would occur every 5 years)

SMK2 every 3 million service station cycles (based on 500 sqm/month it would occur every 7 years)

Q Will HP or partners be offering an end of installation training or a ramp up training and if so what will be covered?

Yes. One day is to be used for installation and operator training by the reseller to ensure that the end user is comfortable operation of the printer.

Learn more at

hp.com/go/Latex360

May 2013

Q How do I dispose of ink cartridges, print heads and the maintenance cartridge?

HP has the Planet Partner Program covered in 70 countries where you need to register to benefit from a free of charge collection service to collect your used ink cartridges and printheads. Certain types of media is also included in the plan. For the maintenance cartridge you should consult your local authorities on the correct disposal method. Registration for the program is done through the HP web.

Other

Q How is the HP Latex 300 durability (scratchability) compared to eco/hard solvent, printed on banner and SAV?

It is comparable to hard solvent on SAV and banners with better performance than eco solvent. This means with HP Latex 300 prints you can avoid the complexity of lamination for low value, short duration jobs like seasonal window graphics, low value stickers, roll ups and pop ups, and all kind of short term event graphics. For un-laminated use, it is recommended to validate or test the suitability for your specific applications.

Q What is the Epeat certification and is it globally recognised?

It is a global rating system for greener electronics. It is an easy-to-use resource for purchasers, manufacturers, resellers and others to identify environmentally preferable devices. The EPEAT system combines strict, comprehensive criteria for 10 different categories including design, production, energy use, air quality and recycling with ongoing independent verification of manufacturer claims. It is a voluntary marking similar to Energy Star but more comprehensive.

Q Is there any risk of customers getting allergies from touching latex prints or from operating the equipment?

Latex polymers are a key innovation of HP Latex Inks. Latex polymers form a durable film on the surface of the media that protects the pigments. "Latex" is simply a term that describes a stable, aqueous dispersion of microscopic polymer particles. It is important not to confuse the latex polymers used in HP Latex Inks with those found in natural materials, such as latex rubber. While some individuals experience skin irritation from contact with natural latex compounds, the synthetic polymers used in HP Latex Inks are non-allergenic. So, we would not expect someone to have a reaction to touching a cured print made by HP Latex Inks.

Q Can I benefit from HP WallArt software if I purchase a HP latex 300 printer?

Yes, all HP Latex printer owners will have free access to use HP WallArt software.

Learn more at

hp.com/go/Latex360

May 2013

Printer comparison table

	HP Latex 360	HP Latex 330	HP Latex 310
Size	1,63m/64in wide	1,63m/64in wide	1,37m/54in wide
Max Loading capacity	42kg (92.6lb) 250mm (9.8in)	42kg (92.6lb) 250mm (9.8in)	25kg (55lb) 180mm (7.1in)
Power connection	Two-phase power socket 16A +16A	Two-phase power socket 16A +3A	Standard plug 200-240V 13A+3A
RIP in the box	Not included	SAi Flexiprint HP Basic Edition with dealer upgrade option to premium	SAi Flexiprint HP Basic Edition with dealer upgrade option to premium
Take up roll	Yes	Yes	optional extra
Warm up time	1.5 minutes	1.5 minutes	1.5 minutes
Front panel	8 inch	4.3 inch	4.3 inch
Color consistency scanning 2dE2000 on 95% of colors	Yes including printer to printer consistency between HP Latex 360 Printers	Yes	Yes
ICC color profiling	Yes- embedded	No - external	No- external
Double sided printing	Yes	No	No
Energy consumption	4.6kW	2.6kW	2.2kW
Spindle core size	3 in	2in with 3in adaptor	2in with 3in adaptor
Ink collector kit for textiles	Yes	No	No
In line x cutter	Yes	No	No

Learn more at

hp.com/go/Latex360

May 2013