# Firmware GEMINI\_08\_23\_11.1



For the HP Latex 2700 Printer Series

May 2023

New versions of firmware and software for the HP Latex 2700 Printer series are available to download.

HP recommends that all printers are upgraded to the new firmware and software as soon as possible. New printers must be upgraded during installation.

# This new release includes:

- 1. Firmware: GEMINI\_08\_23\_11.1
- 2. HP Internal Print Server (IPS): IPS 22.15.8
- 3. HP Internal Print Server Maintenances: IPS 22.15.2 3R74xx Maintenances

This is the general availability version. It should be installed in all new and existing printers with the following instructions.

**IMPORTANT:** These firmware versions are not backwards compatible: once installed you cannot downgrade the printer to the previous one.

NOTE: The file "HPIPS-22.15.2-Maintenances-3R74xx.exe" must only be used if maintenance does not synchronize automatically. Refer to the corresponding newsletter for further information.

## **Upgrade instructions**

The firmware and the Internal Print Server (IPS) must be installed together. No other combination is supported. The firmware update is allowed in **normal mode** only. Do not try to update in **diagnostic mode**, or in any other mode, unless it is required by Global Business Unit.

Mandatory installation order:

- 1. Firmware
- 2. HP Internal Print Server (IPS)

Related links: www.hp.com/go/latex/

Printers related to this article: HP Latex 2700 printer series

## Installation through the maintenance upgrade

1. A maintenance alert will appear in the IPS warning when the new firmware is available.



2. By entering maintenance, a list of improvements will be displayed with two buttons, **Install Firmware** and **Install IPS**. Upgrade the firmware first and then the IPS.

1/3 New firmware and software release available:

- MR3 (FW: GEMINI\_08\_23\_11.1
- IPS: HPIPS-22.15.8

2/3	<ul> <li>IMPORTANT:</li> <li>Do not proceed with the upgrade if a severe error is present.</li> </ul>
	Update System
	Rearm the unit when requested.
3/3	<ul> <li>IMPORIAN I:</li> <li>Do not close the maintenance, it will be done automatically after you press the "Update System" button.</li> <li>During the update process, the system will not provide progress feedback for some time. Just leave the procedure to finish by itself.</li> </ul>
	<ul> <li>The first application boot-up can take several minutes, with only the splash screen visible.</li> <li>Reboot the computer after the System upgrade.</li> <li>In case of any issues during the upgrade, IPS and firmware files can be found in the following directory: (Program Data)HPUPSImplemances(ASIU recourse)     </li> </ul>

Note:			

- Firmware update is allowed in Normal mode only.
- Do not proceed with the upgrade if a severe error is present as the Printer HDD may become corrupted.
- Do not close the maintenance during the firmware upgrade process and prior to reaching the final maintenance step. It might not be possible to enter the maintenance again, therefore only the firmware will be upgraded.
- If there are any failures during the process, installer files can be obtained from "C:\ProgramData\HP\IPS\maintenances\ASU\resource" or support.hp.com.

## **Manual Installation**

Download and unzip the files

- 1. This new release is available from:
  - http://hp.com/go/Latex2700/firmware
- 2. Download the three files that contain the upgrade files:
  - MR3\_GEMINI\_08\_23\_11.1\_\_IPS-22.15.8.z01
  - MR3\_GEMINI\_08\_23\_11.1\_IPS-22.15.8.z02
  - MR3\_GEMINI\_08\_23\_11.1\_\_IPS-22.15.8.zip
- 3. Extract the content using a file compressor utility (do not use the one built into Windows).
- 4. Turn off Tablet mode: Swipe in from the right-hand side of your screen to open the action center. Turn off Tablet mode by touching the Tablet mode icon.



5. Copy the files onto the IPS PC's hard disk (it is recommended to use a designated folder, not the desktop).

#### Update firmware

IMPORTANT: The firmware update should never be done if the printer is in a Severe Error state.

- 1. In **Normal mode**, tap the **About** icon at the bottom right of the Internal Printer Server's main window. A window that shows the details of the current firmware version installed in the printer will appear.
- 2. Tap **Update firmware** and browse to select the GEMINI\_08\_23\_11.1.rfu.*fmw* file. Finally, select the file by clicking on "Select".

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3. The firmware will be uploaded and installed on the printer. The status of the update can be checked on the right-hand side of the IPS main window. There are two possible statuses: **receiving** and **installing**.

(b) 🎽	Upgrade									Ø	Q
G Substrate		ð Ink	Ø About					[ii] Queue m	anagement		
			FIRMWARE VEHERON Skaar_15_18_31.10			pdate firmware			Default		MOVE BELT (mm)
			SERIAL NUMBER Sg6b71n003 PRODUCT NUMBER K Firmware upda	PRODUC Hp r20 SERVICE	T NAME 00 printer EVERSION						
C System			Preparing firmware	e update. Do not turn off	printer	-					(mm) Printing ~ 0 EDGE HOLDERS
						d			No queue preparo		(mm)
						Close	ances				Installing
	6.	0	2	0	æ		(			3	

4. Upon completion, the IPS will show the following message. Tap **Ok** to continue. At this point, the printer will automatically reboot. If it does not, reboot the printer manually.

10.00	
F	Firmware update
	Firmware was updated successfully. Printer will now be restarted.
-	Ok
_	

IMPORTANT: The first reboot after the firmware upgrade takes more time than usual.

5. Wait until the printer reboots completely.

Update the HP Internal Print Server (IPS)

1. Make sure the printer has started up completely.

- 2. Tap the **About** icon at the bottom right of the Internal Printer Server's main window. A window showing the details of the current Internal-Print-Server version installed in the printer will appear.
- 3. Tap Update IPS and browse to select the HPIPS-22.15.8-Installer.exe file.
- Follow the on-screen instructions until the new software is installed. The installer will close and remove the previous IPS software. It may take some time. Tap Close to complete the installation.
- 5. If the HP Internal Print Server software does not boot automatically, first tap HP Internal Print Server and then HP Internal Print Server Front End.



6. On the first boot, the Printer Data Sharing Agreement (PDSA) window will appear. Please click **Accept** to continue.



HP highly recommends accepting the Information retriever functions for a more efficient and improved remote support experience.

7. Finally, you need to ensure that the Remote assistance option is enabled in the IPS Preferences window so that the system can send printer information to the HP servers. Note that this option will be enabled by default if the PDSA has been accepted when installing the new Internal Print Server.

Ø	🧭 Idle		¢ 🕀	
🕢 Subst	O Preferences			
LOADED WIDTH 159.96 cr CONSUME 242.7 cm	System Job Management Connectivity Support Service	JMF connection URL http://hplatex:8080/jmfservice Hot folder Jobs are automatically added from selected folder to the inbox Target Interview		MOVE SUBSTRATE (CM) 1000 
👄 Syster	HP Cloud Services	Remote assistance		Printing ~ 0 INK COLLECTOR
THE REAL PROPERTY OF				TAKE-UP REEL
United States	Substation Intercomposition	Close Save	rint O About printer	

## **RIP synchronization**

The actions below must be carried out after the firmware upgrade to synchronize the media list, and to import and export the ICC profiles.

#### Caldera RIP

- 1. Export your custom ICCs and save them in a folder on your PC.
- 2. Go to Easy Media.
- 3. Select the printer and follow the steps to synchronize the media. Click Import > Autosync > Full Reset.

IMPORTANT: This option deletes all existing media in Caldera and imports all media located in the IPS. If some media is stored in the RIP but not in the IPS, this media will be deleted. Make sure you have a backup of the media missing from your IPS.

- 4. Check that all media have been synchronized.
- 5. Go to **Easy Media** and import your previously saved custom ICCs.

#### **Onyx RIP**

- 1. Export your custom ICCs and save them in a folder on your PC.
- 2. Go to Configure Printer > Device > Features > Configure and select From Printer. Select all the media and click OK to synchronize.
- 3. Go to **Media Manager** and import your previously saved custom ICCs. You are also required to advise the customer to update the RIP driver to ensure they have the latest improvements and bug fixes.

## **Release Notes**

New functions and improvements

• Automatic Printhead Alignment.

Automatic printhead alignment routine has been included which aligns all printheads except white ones.

The main advantage of this procedure is that it is fully unattended and that the plot does not need to be checked by the operator. The Verification plot requires:

- A nozzle in good condition
- Readable media glossy self-adhesive vinyl or any other media with smooth surface



NOTE: It cannot be triggered when the printer is in white configurations (underflood or spot, overflood, sandwich).

Automatic PH Alignment plot:



#### Automatic Printhead Alignment or Verification plot?

The verification plot can be used to enhance IQ based on operator's skills.

Automatic printhead alignment is an unattended process to achieve production quality.

Automatic PH alignment	Verification plot – Manual
Unattended	Operator corrects values
White self-adhesive vinyl or smooth surface	More medias accepted
10 min	10 min
Production quality	Allows finetuning for top IQ
White PH not included	White PH included

• Automatic PH alignment adjustment when modifying the printhead to paper space

This feature enables the increase of the pen to paper space (PPS), maintaining the alignment and preventing the need to re-align in this situation.

There are different cases where it can be useful to print with a different PPS from the one where the printhead calibration was done. This feature will be used when:

- The ink collector is installed.
- o The user adds an offset to avoid wrinkles or crashes substrate deformation.



Standard PPS

Standard PPS + 1 mm offset



Standard PPS +1 mm offset + compensation

This feature works after doing manual and automatic printhead alignment.

In that case, if you print the alignment verification plot, it will be printed without the compensation showing misalignment particularly on values with 3.

IMPORTANT: If a higher PPS than usual is used, image quality cannot be guaranteed to be optimal, and there may be some blurriness due to the additional spray, even after automatic correction.

• Rotate jobs in IPS

It is possible to rotate individual job on the IPS to avoid the need of re-ripping it:

Substrate	1					Θ	ወ
	Jop		1				
Generic Self-Adhesiv Consumed length: 0	ОК		Size 762.17 x 507.37 mm	Resolution 600 dbi	perties	_	MOVE SUBSTRA (MM)
mm Unload							20
Inks	Job name	HP_Control_Print20x30in-1			1	<u> </u>	:
	Copies	- 1 +	- Constant Statistics			21	
Printheads	Double-sided	0			- - 	8	(MM) Printing
$\sum \mathbf{n}$	Substrate type	Generic Self-Adhesive 🖉 🔉				~	ő
Check and clean	Color mode	6 colors 🗸			B B B	0	
System	Printing method	N/A ~					
2	Deleterade	Deschution de 110 Ce		States and states	н	0	TEMPERATUR
System errors	Print mode	Production 4p-110-bc			-1	^	
Reinitialize	Roll preference	Auto			]		
Maintenances				Close Save as	Save		
10							
Maintenance tasks			Estimated printing time Tota 08m 507.	Rength 37 mm			

NOTE: Once the job has visually rotated and it is in the queue, it will take a few moments before it can be printed (the print button will be grey until ready).

• Printing color Printmodes in White configuration

With previous firmware versions, if a color only job was intended to print in any white configuration, a notification would pop up stating that it was not possible to print:

istory	+ 1 Generic Self-Adhesive ×	
	1600 x Unknown mm	
✓ Copies Print mode Arrived Status	1 issues found	View
01_Print20x30in-1         Oucle 1           17.37 mm         0/1           Production 4p-1102 menths1         Unprintable           1         Issues found		<u>,  -1000  -1200  -1400</u>
rusting_CMYK100LcLmS5_100in_10-01-2 13.33 mm 0/1 0utdoor 3p-80-6c printed.	fferent printhead configuration to be	
ideA-OK Dupticate		
ldeA-OK 10 mm 0/1 SW3L 29p 100% W	ОК	
st. (x1) ideA-OK 10 mm 0/1 W0F100 260% S mentify   Error		

With the new firmware, the process displayed below can be followed to create a blank white layer on the IPS and print the color-only job using a white printmode without having to re-rip.

IMPORTANT: Color consistency is not up to the expected standard when comparing jobs printed in color and those done in white configurations.

NOTE: Printing color only images in white configuration will reduce the throughput of the machine. It is only recommended for quick re-prints without color consistency needs. For all other situations, it is recommended to change to color configuration as it will be more time efficient.



• White layer movement in IPS to mitigate White to Color misalignment. A new feature to manually move the white layer in any direction to improve the alignment to color layer. This can be used in addition to Choke that is set to 2pixels by default.

White ink options				
Choke white ink Shrink white layer ed	ge			
→	Pixels to shrink	-	2	+
	Shrink only where color layers overlap wh	ite layer	1	
White layer offse	et			
	Pixels to move horizontally Negative value to move the layer to the left and positive value to move the layer to the right.	-	0	+
$\rightarrow$	Pixels to move vertically Negative value to move the layer down and positive value to move the layer up.	-	0	+

On the description, it explains the direction the white layer is moving taking as a reference the view on the IPS queue

#### White layer offset



Pixels to move horizontally		0	-	
positive value to move the layer to the right.	-	0	Ŧ	
Pixels to move vertically Negative value to move the layer down and positive value to move the layer up.	-	0	÷	

White layer move	es to:	
Horizontally	-	Left - Service side
,	+	Right – IDS side
Vertically	-	Down – Backwards – Input
	+	Up - Forward - Output

• Vacuum setting can be set to 0

In situations where the media adapts to the platen ribs creating vertical banding or other defects, it may be necessary to set the vacuum to 0 Pa. Adjusting other settings like Input and Output tensions may also be needed.

When the setting is set between 0 and 49 Pa the vacuum pump is off and it is the same as at 0.

To have this option, a clone from a Generic after the FW upgrade is needed. Modifying an old media will not show this option.

NOTE: for Paper media family, minimum vacuum is 150.

Advanced properties			==		×	
Input tension (N/m)	- 60 +	From 0 to 35	60		0	
Print-zone vacuum (Pa)	- 0 +	7	8	9	$\langle X \rangle$	
Start of queue gap (1200 mm)	ο	4	5	6		
		1	2	3	ОК	
		+/-	0		UN	

• Add new media plot on White Printmodes In previous firmware, this plot was only available for color printmodes.

Define print mode and test i	Name	White SP W100 7p 120
	Color mode	6 colors + white
	Printing method	White spot
	Number of passes If there are substrate wrinkles, increase passes and decrease temperature	7
	White density This value cannot be manually set	100
	Print ink drying and color saturation test (optional) To enable the 'Test plot' button, make sure that substrate is loaded and all fields	is filled in
Select print-mode settings f print test	om the Ink density (%)	120
<u></u>	Ink density B (%)	NA
	Advanced Settings	

• Beacon reports empty supply

	IPS State	Red light	Yellow Light	Green light
	Ready/ idle	Off	Off	On
	On error	On	Off	Off
	Printing	Off	Off	Blinking
	Substrate ready	Off	Blinking	Off
MR3 New	Supply ouf of Ink	Off	On	Off

- Printer logs package creation from IPS UI ("Report a problem" option)
  - Plug a USB device into the socket on the Internal Print Server monitor
  - o Click on "Report a problem"
  - $\circ~$  A compressed zip file will be created in the USB device with the printer logs

	<ul> <li>⊕ ⊕ ⊕</li> </ul>	
	Start in normal mode	
ueue pro	Switch to diagnostic mode	
ob	Switch to low-power mode	
PIES	Shut down	
OSITION	Report a problem	
	SCAN BEAM (MM)	1

- Energy consumption improvement when machine is turned OFF
  - $\circ$   $\;$  Automatically turn off drying and curing fans when turning off the printer  $\;$
- New maintenances for ink collector when using white

## Bug fixes

- Dual Roll printing improvements
  - Dual roll scrolling
  - Dual roll length for both queues appears in the IPS
- Double side printing improvements
- Job gap allows decimal units
- Sandwich jobs over 1.6 m / 5.25 feet wide
- Backlit WOF Printmodes fixed
- Sandwich bugs fixed:
  - 5 Layers curing
  - 3 Layers W30 and W60 jobs cancelled
- Other minor FW bugs fix.