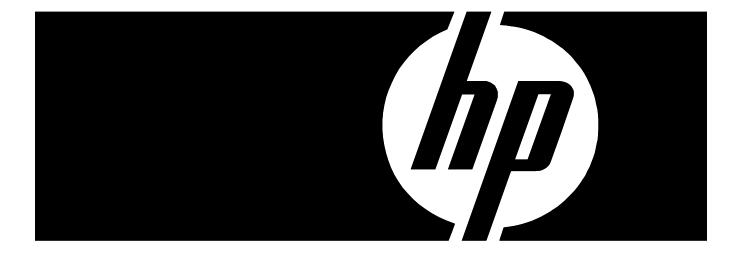# UV & Solvent Printers

600 x 300 Print Resolution FAQ

Introduction

This document answers some of the frequently asked questions (FAQ) regarding the 600x300 dpi print resolution feature found on selected HP and ColorSpan Legacy printers.

The FAQ

1. What printers have 600x300 capability?

   600x300 is available on the following printer models:

   - DisplayMaker 72UVX & 98UVX
   - DisplayMaker 72SI & 98SI, DisplayMaker 98SX
   - HP Scitex FB910 (ColorSpan 9840uv

   The HP Designjet H series also has 600x300 capability, but this printer is not discussed in this document.

2. On printers with 600x300, what are the available print modes?

   Solvent printers with 600x300 capability have 600x300 High Quality, 600x300 Production, 600x300 Billboard modes. The UV printers have 600x300 Production only. A 600x300 Billboard mode on the UV printers would move the media past the lamps too quickly for the ink to cure.

3. What are the print speeds in all print modes?

   The table below shows the various speeds of all print modes available across the platforms. See question #1 to confirm what printers have what modes.

Table 1 Print Speeds by Resolution

Printer Width	Print Resolution	Square Feet Per Hour at Maximum Width, Bidirectional		
		Billboard	Production	High Quality
72	600x600	400	200	100
	600x300	650	400	200
98	600x300	438	225	112
	600x300	700*	438	225
*98 speeds shown are for 98UVX or 98SX. The FB910 is approximately 15% faster in this mode only.				

4. How is jet replacement affected by 600x300 printing?

   600x300 print modes have the same capacity for jet replacement as their corresponding 600x600 versions. Therefore 600x300 Production mode has the same jet replacement as 600x600 Production mode, and 600x600 Billboard mode has no jet replacement, just as 600x600 mode has no jet replacement.

5. How do I calibrate for 600x300 printing?

   No additional calibration of the printheads (jet mapping, Bidi, Head-to-Head) is necessary. For optimal results in 600x300 Production mode, set the printer to Billboard mode and calibrate the media feed (not required on FB910). When calibration is complete, set the printer back to Production mode. When the printer is set for Production mode and receives a 600x300 job, the advance is the same as if it were a 600x600 Billboard job. There is currently no direct method to calibrate for 600x300 Billboard mode. Use the "On-the-fly" adjustment during printing to correct any media advance inaccuracies.

   When color calibrating on the HP Print Server, be certain that (1) you select a transform with "6x3" in the file name, indicating that the transform has color data for 600x300 resolution, and (2) at the top of the profile selection window, the "Printing Resolution" menu is set to "600x300".

6. How do I configure the printer for 600x300?

   In short, there is no configuration of the printer for 600x300. When the print job sent from the server is a 600x300 job, the printer will automatically print at the intended resolution.

   The SI printers have some settings that determine what to do with the auxiliary dryer in the 600x300 modes as well as the 600x600 modes. The UVX printers have a setting for what to do when a 600x300 job is received but the printer is currently configured for any mode other than Production.

7. How do I configure a HP print server for 600x300 printing?

   Tech Note 2558, Configuring the ColorSpan Print Server for 600x300 DPI Output, found on the website, describes this procedure in detail.

8. How do I configure an Onyx print server for 600x300 printing?

   Tech Note 2040, Configuring Onyx RIP products for 600x300 DPI output, found on the website, describes this procedure in detail.

9. How is 600x300 resolution achieved?

   The four printheads of each color interlace to create a single "super swath" that achieves the desired resolution in the Y-axis. By increasing the advance, the interlace is spread further apart, so that the "super swath" has a Y-axis resolution of 300 dpi rather then 600 dpi. By increasing the advance, speed is increased at the sacrifice of resolution in the Y-axis only. Increasing the advance allows a larger section of the printhead to jet on each pass, so the size of the swath appears to double relative to the corresponding 600x600 mode.

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