HP UV/IR Invisible Ink System



The HP C6121A UV/IR invisible ink system improves document appearance by providing a way to print control codes that are invisible to the human eye, yet remain machine-readable.

Features

HP designed the UV/IR invisible ink system for high-speed document production applications that use codes to customize printing services or to verify and match content. The UV/IR invisible ink system enables businesses to produce customized documents without the need for unsightly visible codes. Invisible codes can be easily and inexpensively repositioned or printed in multiple locations while still preserving the look and feel of the original document.

This system consists of a print cartridge and bulk ink supply connected by a tube. The ink contains ultraviolet (UV) and infrared (IR) dyes, which fluoresce when exposed to UV or IR light sources. The ink is visible to the human eye only when it is illuminated with a UV light source. IR dyes can be machine-read using a laser scanner or camera system.

The UV/IR invisible ink system is designed for use in applications where high-quality output on porous media is required. Non-contact, drop-on-demand inkjet technology delivers reliable and accurate printing. The print cartridge can be snapped in and out for easy replacement, while the high-capacity bulk ink delivery system makes sure replacements are infrequent.

Benefits

The HP C6121A UV/IR invisible ink system:

- Increases security. For example, documents can have invisible watermarks to identify them as originals.
- Prints over normal toner text areas. For example, a bar code image is captured between print lines.
- Frees up valuable media real estate and improves media appearance by eliminating issues associated with visible code.

Using UV/IR invisible ink provides unparalleled flexibility with printing, handling, and inserting equipment. Invisible control codes provide 100% verifiable assurance that the right content has been printed and sent to the intended recipient. These codes also enhance privacy and security of customer information.

Why choose HP?

HP is the worldwide leader in imaging and printing technologies. We bring our innovative, reliable, environmentally-friendly, and easy-to-use solutions to a variety of industrial markets. As pioneers of thermal inkjet printing, HP knows the technology inside and out.



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Frequently asked questions

Who are the intended users of the C6121A?	The C6121A UV/IR invisible ink system has been designed to meet the needs of high-output production companies that require reliability, security, and flexibility.
Why have both UV and IR components in the ink?	Having both UV and IR components in a single ink provides:
	• Convenience. Operators can easily verify printing with an inexpensive black light.
	• Media flexibility. On an IR medium with extensive UV brighteners, the UV signal cannot be detected easily, but the IR signal can still be read reliably.
	• Security. UV/IR components help provide two levels of protection.
What are the general media recommendations?	• High-quality offset bond, standard office papers, and standard envelope grade materials.
	• Brightness ranging from 84 to 96. A brightness level greater than 90 won't display UV easily.
	• Basis weight: 75 grams per square meter and above.
What are the advantages of HP Thermal Inkjet (TIJ) Technology?	• Cost-effective. Requires no warm-up cycle and no downtime. When it's time to replace a print cartridge, replace only the one that's needed.
	 Easy to use. No special training is required to operate and maintain thermal inkjet printers. The print cartridge design allows it to be snapped in and out for easy replacement.
	• Fast. Hundreds of tiny nozzles firing at a high frequency allow high-quality printing at high speeds.
	 Reliable. TIJ is less sensitive to air bubbles in the firing chamber than other printing technologies, avoiding print quality problems and delays caused by trapped air.
	• Flexible. Supports a wide variety of media.
	• High quality. TIJ places smaller drops more accurately, producing consistently superb image and text quality.
	 Environmentally safe. With thermal inkjet, there is no need for service technicians qualified to handle volatile solvents, and no noxious fumes.
	• Lower cost of ownership. A thermal inkjet printer can cost tens to hundreds of thousands of dollars less than other

Technical specifications

P/N	C6121A
Ink type	Dual wavelength invisible dye-based aqueous ink
Resolution	600 dpi
Nozzle count	300
Print swath	.5 in
Maximum firing frequency	12 kHz
Avg. drop volume	24 pl
Avg. delivered ink (ccs)	370 ccs
Number of electrical interconnect pads	52
Operating conditions	10 to 40° C, 10 to 80% RH
Shipping/storage conditions (in original packaging only)	10 to 30° C, 5 to 80% RH Altitude: 0–5000 meters Orientation: nozzle up or side

printing equipment, reducing the market entry cost.

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Contact information

- To discuss inkjet technology OEM opportunities with HP:
- Go to **www.hp.com/oeminkjet** and send us an email message.
- Call 858-655-3524 and leave a voicemail message.
- Mail your inquiry to: Hewlett-Packard Company, Specialty Printing Systems, Mailstop 66-654, 16399 West Bernardo Drive, San Diego, CA 92127, USA.

