

HP Thermal Inkjet 2.5 Technology (TIJ) Family



Build your custom solutions on proven technology



Main applications

- Mail addressing
- Postage
- Product identification coding and marking
- Transaction

Key highlights

- Consistently superb image and text quality
- High-volume print applications
- Low cost per print
- Low intervention rates
- Lower total cost of ownership and market entry
- Minimum maintenance
- No warm-up cycle or downtime
- Print cartridges are designed for easy replacement
- Print cartridges have built-in authentication for accurate ink usage and parameter control

Get the design flexibility you need to build a wide range of products and gain a competitive advantage, with HP thermal inkjet 2.5 (TIJ) inks and components. The broad HP thermal inkjet 2.5 portfolio is based on field-proven HP TIJ technology. Chosen because it is clean, easy to use, reliable and odor-free, HP TIJ technology is used in a wide range of products in diverse manufacturing settings across the globe.

Experience high-quality, high-speed, and reliable printing

HP thermal inkjet 2.5 technology provides high-resolution bar codes, logos, and alphanumeric text with a reliable, no-maintenance, easy-to-use, snap-in and snap-out configuration. It prints superb text and image quality at high speeds across a wide range of substrates.

Enjoy easy use

Users can get to work immediately, and operate and maintain HP TIJ 2.5-based printers without any special training, and without warm-up cycles or downtime. When the ink in a cartridge is depleted, the empty cartridge is the only one that needs to be replaced. The special design enables easy snap-in and snap-out replacement.

Target customers

Ideal for companies that require high print quality with a reliable, maintenance-free solution that supports intermittent or continuous printing.



Expanding portfolio of inks covering a broad range of substrates

HP's innovative aqueous and solvent inks have a proven track record of compatibility with a wide range of substrates. These inks produce sharp, crisp text and bar codes. Fast drying time provides high-quality output without transfer or smearing, and without compromising print speed.

Single-use cartridges

	Product number	Product name	Smart Card	Aqueous/Solvent	Ink color	Ink type	Avg. drop volume (pl)	Ink fill level (ml)	Maximum firing frequency (kHz)
🔹	B3F36A	HP 1918 Black Dye Smart Card Ink Cartridge	✓	A	Black	Dye	26	48	12
🔹	B3F37A	HP 2531 Smart Card Ink Cartridge	✓	A	Black	Dye	26	50	12
🔹	B3F38A	HP 45A Smart Card Ink Cartridge	✓	A	Black	Pigment	33	47	12
🔹	B3F58A ¹	HP Black 2580 Solvent Print Cartridge	✓	S	Black	Dye	36	50 ²	18
🔹	B3F58B ¹	HP Black 2580 Solvent Print Cartridge	✓	S	Black	Dye	38	47 ³	18
🔹	C6195A	HP51645A 600 DPI Disposable Fast Dry Black Print Cartridge, Generic Packaged		A	Black	Pigment	30	49	12
🔹	C8842A	HP51645A 600 DPI Disposable Versatile Black Print Cartridge, Generic Packaged		A	Black	Pigment	25	49	12
🔹	CG339A	45A Black Cartridge 10-Pack		A	Black	Dye	26	47	12
🔹	CG378A	HP Black 2531 Dye Print Cartridge		A	Black	Dye	26	50	12
🔹	CQ849A	OEM Durable Black Ink Cartridge		A	Black	Pigment	30	50	10
🔹	F0L36A	HP Versatile Black Smart Card Ink Cartridge	✓	A	Black	Pigment	29	49	12
🔹	W3T10B ¹	HP 2590 Solvent Print Cartridge		S	Black	Dye	29	47 ⁴	18
🔹	F0L69A	HP 2520 Black Smart Card Ink Cartridge	✓	A	Black	Pigment/dye	26	50	10
🔹	F0L95A	HP 2510 Black Pigment Smart Card Print Cartridge	✓	A	Black	Pigment	26	47	12
🔹	Q2344A	Black 1918 Dye Print Cartridge		A	Black	Dye	26	48	12
🔴	C6128A	Non Fluorescent Red Print Cartridge		A	Red	Pigment	30	48	12
🔵	C6170A	HP51645A 600 DPI Disposable Spot Color Blue Print Cartridge, Generic Packaged		A	Blue	Dye	26	48	12
🔵	Q2354A	Blue 2242 Pigment Print Cartridge		A	Blue	Pigment	21	50	12
🔴	W3S87A	OEM Fast Dry Black Print Smart Card Cartridge	✓	A	Black	Pigment	30	49	12
🔵	W3S89A	OEM Spot Blue Print Smart Card Cartridge	✓	A	Blue	Dye	26	48	12

¹ Design and manufacture of HP2580 and HP2590 solvent inks are in compliance with Good Manufacturing Practice: Printing Inks for Food Contact Materials (Rev 4, 2016), published by the European Printing Ink Association (EuPIA). To receive a copy of the Statement of Composition, submit a request through HP SPS customer support request form hp.com/go/spssupport.

² Average delivered ink is 35 ml (vertical) and 25 ml (horizontal).

³ Average delivered ink is 34 ml (vertical) and 31 ml (horizontal).

⁴ Average delivered ink is 34 ml (vertical) and 33 ml (horizontal).

Delivering high-volume solutions



HP bulk ink delivery systems are designed to meet the needs of long, high-volume printing applications:

- Large ink supplies minimize operator interventions.
- Advanced electronic functions enable designers to build in ink level monitors and signals to provide uninterrupted printing during long print runs.
- Ink cartridges and ink supplies can be changed independently.
- Ink supplies can be hot-swapped.

Bulk supplies

Technical specifications

	Product number	Product name	Bulk cartridge	Bulk supply	Smart Card	Aqueous/Solvent	Ink color	Ink type	Avg. drop volume (pl)	Ink fill Level (ml)	Maximum firing frequency (kHz)
🔹	C6119A	HP51645A 600 DPI Black Inkjet Bulk Ink Supply and Print Cartridge, Generic Packaged	✓	✓		A	Black	Pigment	33	370	12
🔹	F0L89B	HP Black 2580 Solvent Ink Printhead	✓		✓	S	Black	Pigment	38	30	18
🔹	F0L91A	HP Black 2580 Solvent Bulk Ink Cartridge		✓	✓	S	Black	Pigment	n/a	400	n/a
🔹	Q2320A	Versatile Black Printhead and Connector Assembly	✓			A	Black	Pigment	29	39	12
🔹	Q2321A	HP Versatile Black Bulk Ink Cartridge		✓		A	Black	Pigment	n/a	400	n/a
🔹	Q7456A	HP Black 4500 Pigment Printhead and Connector Assembly	✓			A	Black	Pigment	29	38	12
🔹	Q7457A	HP Black 4500 Pigment Bulk Ink supply		✓		A	Black	Pigment	n/a	400	n/a
🔹	W3S26A	HP Black 2510 Bulk Supply Smart Card Cartridge	✓	✓	✓	A	Black	Pigment	26	370	12
🔹	W3S88A	OEM Black 45A Bulk Supply Smart Card Cartridge	✓	✓	✓	A	Black	Pigment	33	370	12
🔹🔹🔹	Q2356A	Blue 2242 Pigment Bulk Ink supply		✓		A	Blue	Pigment	n/a	400	n/a
🔹🔹🔹	Q2357A	HP Non-fluorescent Red Bulk Printhead and Connector Assembly	✓			A	Red	Pigment	29	38	12
🔹🔹🔹	Q2358A	Non-Fluorescent Red Bulk Ink supply		✓		A	Red	Pigment	n/a	400	n/a
🔹🔹🔹	Q2382A	Blue 2242 Pigment Printhead and Connector Assembly	✓			A	Blue	Pigment	29	42	12

🔹🔹🔹 Color |
 🔹 Black |
 A Aqueous |
 S Solvent



1:1 configuration



2:4 configuration



4:4 configuration

Designing flexibility







































HP engineered robust flexible bulk ink delivery systems with advanced features to meet the needs of high-volume print applications where superior print quality, low cost per copy, and minimal user intervention are required. HP components and design guides offer designers the opportunity to configure any combination of HP printheads and supplies.

Design features include:

- Cartridge and supply authentication
- Easy mounting of printhead and cartridges
- Electronic interfacing to printhead and cartridges
- Flexible manifold design
- Flexible positioning of printhead and cartridges
- Out-of-ink notification
- Pressurized and gravity feed options

Enablers

Technical specifications


Product number	Product name	Single-use/ Bulk	Aqueous/ Solvent	Smart Card	Description
1825-0057	 OEM ASIC Control Chip for Printers	Single			Use when you want the flexibility to design your own driver board, while leveraging HP's tested firing parameters.
5182-6837	 HP51645A Pen Cartridge Wiper	Single		✓	The pen cartridge wiper is part of the service station and is used to wipe the nozzle plate to remove any debris that could obstruct the nozzles or affect the ink drop trajectory.
5182-6838	 HP51645A Pen Cartridge Cap	Single		✓	Pen cartridge cap, used to cover the pen cartridge orifice plate when not in use to avoid evaporation.
C4557-60045	 HP51645 Pen Cartridge Latch	Single		✓	Replacement latch for the CQ803A Print Cartridge Stall.
C4557-60105	 HP5164A Pogo Pin Connectors	Single		✓	Pen cartridge cap, used to cover the pen cartridge orifice plate when not in use to avoid evaporation.
C6166-80001	 HP51645A Ribbon Cable	Single		✓	Ribbon cable for interfacing the host printing system to the C8855M Driver Board.
C8855M	 HP OEM Pen Driver Board	Single/ Bulk			This printed circuit assembly (PCA) provides both the electrical and logical interface between the host printing system and the printhead. This component is designed to provide proper operation, proper firing, and protection of the printhead. Communicates with the host via a serial data interface.
CQ801B	 OEM Host Printer Smart Card Compnt R.2	Single		✓	Host printer smart card, used by the host printing system to provide authentication of genuine HP pen cartridges and supplies.
CQ802A	 OEM Smart Card Print Ctrtg Driver Board	Single		✓	This printed circuit assembly (PCA) provides both the electrical and logical interface between the smart cart print head and the host printing system. This component is designed to provide proper operation, proper firing, and protection of the printhead. Communicates with the host via a serial data interface.
CQ803A	 OEM Smart Card Print Cartridge Stall	Single/ Bulk		✓	Supports of the stall for easy replacement a 0.5-inch swath width and 600 dpi. Suitable for varied printhead array configurations. Printheads can be snapped in and snapped out.
5042-7013	 HP Male Fluid Connector	Bulk			These ink connectors are specially designed to quickly disconnect for easy system operation. The no-drip design helps maintain a clean operating environment, and air-tight seals prevent air from entering the system when they are connected or disconnected.
5042-7014	 HP Female Fluid Connector	Bulk			These ink connectors are specially designed to quickly disconnect for easy system operation. The no-drip design helps maintain a clean operating environment, and air-tight seals prevent air from entering the system when they are connected or disconnected.
5042-7015	 HP Male Panel Mounted Fluid Connector	Bulk			These ink connectors are specially designed to quickly disconnect for easy system operation. The no-drip design helps maintain a clean operating environment, and air-tight seals prevent air from entering the system when they are connected or disconnected.
FOL72A	 OEM Valve for Bulk Crtg	Bulk			Valve assembly used to attach the print cartridge to the tubing.
Q2308-60001	 HP OEM Enclosed Regulator Assembly	Bulk			Maintains the pressure and ink flow to the printhead. Its small size and enclosed design enables it to be mounted and incorporated easily into any design. With this regulator in place, the bulk ink cartridge can be mounted some distance from the printhead. Management of backpressure and ink flow is handled automatically.
FOM04A	 HP Bulk Ink Cartridge 50-meter Tube	Bulk			HP's solvent ink capable tubing helps to establish secure connections between ink cartridges.
FOL93A	 HP Bulk Print Cartridge Connector Protector	Bulk			Provides a one-time removable connection of FOL72A to the bulk pen cartridge; once attached, this component allows the FOL72A to be removed one time from the bulk pen cartridge.
Q2308-60015	 HP Modular Ink Ink Cartridge Stall Assembly	Bulk			Includes connector assembly, ink seal assembly, and ink stall. Use with 350-400 ml supplies.
FOM03A	 HP Bulk Print Cartridge 25-meter Tube	Bulk			HP's solvent ink capable tubing will help establish secure connections between ink cartridges.

 Aqueous |  Solvent

Learn more at
hp.com/go/oeminkjet

Sign up for updates
hp.com/go/getupdated

   
Share with colleagues

 Rate this document

