# 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.

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# 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<br>number | Product name   | Smart<br>Card | Aqueous/<br>Solvent | Ink<br>color | lnk<br>type | Avg. drop<br>volume | Avg.<br>delivered ink              | Maximum firing frequency |
|---|-------------------|--|---------------|---------------------|--------------|-------------|---------------------|------------------------------------|--------------------------|
| ۵ | B3F36A            | HP 1918 Black Dye Smart Card Ink Cartridge                                       | $\checkmark$  | ۵                   | Black        | Dye         | 26 pl               | 40 ml                              | 12 kHz                   |
| ۵ | B3F37A            | HP 2531 40 ml Smart Card Ink Cartridge   | $\checkmark$  | ۵                   | Black        | Dye         | 26 pl               | 40 ml                              | 12 kHz                   |
| ۵ | B3F38A            | HP 45A 40 ml Smart Card Ink Cartridge  | $\checkmark$  | ۵                   | Black        | Pigment     | 33 pl               | 40 ml                              | 12 kHz                   |
| ۵ | B3F58A            | HP Black 2580 Solvent Print Cartridge  | $\checkmark$  | \$                  | Black        | Dye         | 36 pl               | 35 ml vertical<br>25 ml horizontal | 18 kHz                   |
| ٥ | B3F58B            | HP Black 2580 Solvent Print Cartridge  | $\checkmark$  | \$                  | Black        | Dye         | 38 pl               | 34 ml vertical<br>31 ml horizontal | 18 kHz                   |
| ٥ | C6195A            | HP51645A 600 DPI Disposable Fast Dry Black Print<br>Cartridge, Generic Packaged  |               | ۵                   | Black        | Pigment     | 30 pl               | 42 ml                              | 12 kHz                   |
| ٥ | C8842A            | HP51645A 600 DPI Disposable Versatile Black Print<br>Cartridge, Generic Packaged |               | ۵                   | Black        | Pigment     | 25 pl               | 40 ml                              | 12 kHz                   |
| ٥ | CG339A            | 45A Black Cartridge 10-Pack  |               | ۵                   | Black        | Dye         | 26 pl               | 40 ml                              | 12 kHz                   |
| ٥ | CG378A            | HP Black 2531 Dye Print Cartridge  |               | ۵                   | Black        | Dye         | 26 pl               | 40 ml                              | 12 kHz                   |
| ٥ | CQ849A            | OEM Durable Black 40 ml Ink Cartridge  |               | ۵                   | Black        | Pigment     | 30 pl               | 40 ml                              | 10 kHz                   |
| ٥ | F0L36A            | HP Versatile Black 40 ml Smart Card Ink Cartridge                                | $\checkmark$  | ۵                   | Black        | Pigment     | 29 pl               | 40 ml                              | 12 kHz                   |
| ٥ | FOL69A            | HP 2520 Black 40 ml Smart Card Ink Cartridge                                     | $\checkmark$  | ۵                   | Black        | Pigment/dye | 26 pl               | 40 ml                              | 10 kHz                   |
| ۵ | FOL95A            | HP 2510 Black Pigment Smart Card Print Cartridge                                 | √             | ۵                   | Black        | Pigment     | 26 pl               | 40 ml                              | 12 kHz                   |
| ٥ | Q2344A            | Black 1918 Dye Print Cartridge   | $\checkmark$  | ۵                   | Black        | Dye         | 26 pl               | 40 ml                              | 12 kHz                   |
|   | C6128A            | Non Fluorescent Red Print Cartridge  |               | ۵                   | Red          | Pigment     | 30 pl               | 40 ml                              | 12 kHz                   |
|   | C6168A            | HP51645A 600 DPI Disposable Spot Color Red Print<br>Cartridge, Generic Packaged  |               | ۵                   | Red          | Dye         | 26 pl               | 40 ml                              | 12 kHz                   |
|   | C6170A            | HP51645A 600 DPI Disposable Spot Color Blue Print<br>Cartridge, Generic Packaged |               | ۵                   | Blue         | Dye         | 26 pl               | 40 ml                              | 12 kHz                   |
|   | CG401A            | OEM 2242 Blue Pigment 20ml Ink Cartridge   |               | ۵                   | Blue         | Pigment     | 21 pl               | 10 ml                              | 12 kHz                   |
|   | Q2354A            | 42ml Blue 2242 Pigment Print Cartridge   |               | ۵                   | Blue         | Pigment     | 21 pl               | 42 ml                              | 12 kHz                   |

Color

Black

Aqueous

Solvent

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## 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<br>number | Product name   | Bulk<br>cartridge | Bulk<br>supply | Smart<br>Card | Aqueous/<br>Solvent | Ink<br>color | lnk<br>type | Avg. drop<br>volume | Avg.<br>delivered ink | Maximum firing<br>frequency |
|------------|-------------------|--|-------------------|----------------|---------------|---------------------|--------------|-------------|---------------------|-----------------------|-----------------------------|
| ٥          | C6119A            | HP51645A 600 DPI Black Inkjet Bulk Ink Supply and Print<br>Cartridge, Generic Packaged | $\checkmark$      | ~              |               | ۵                   | Black        | Pigment     | 33 pl               | 370 ml                | 12 kHz                      |
| ۵          | FOL89A            | HP Black 2580 Solvent Ink Printhead  | $\checkmark$      |                | $\checkmark$  | \$                  | Black        | Pigment     | 38 pl               | Up to 1200 ml         | 18 kHz                      |
| ۵          | F0L91A            | HP Black 2580 Solvent Bulk Ink<br>Cartridge (400 ml)                                   |                   | ~              | ✓             | \$                  | Black        | Pigment     | n/a                 | Fill 400 ml           | n/a                         |
| ۵          | Q2320A            | Versatile Black Printhead and Connector Assembly                                       | $\checkmark$      |                |               | ۵                   | Black        | Pigment     | 29 pl               | Up to 800 ml          | 12 kHz                      |
| ۵          | Q2321A            | HP Versatile Black 350-ml Bulk Ink Cartridge   |                   | √              |               | ۵                   | Black        | Pigment     | n/a                 | Up to 800 ml          | n/a                         |
| ۵          | Q7456A            | HP Black 4500 Pigment Printhead and Connector Assembly                                 | $\checkmark$      |                |               | ۵                   | Black        | Pigment     | 29 pl               | 29 ml                 | 12 kHz                      |
| ۵          | Q7457A            | HP Black 4500 Pigment Bulk Ink supply, 350 ml  |                   | ~              |               | ۵                   | Black        | Pigment     | n/a                 | Up to 350 ml          | n/a                         |
| ۵          | W3S26A            | HP Black 2510 Bulk Supply Smart Card Cartridge   | $\checkmark$      | ~              | $\checkmark$  | ۵                   | Black        | Pigment     | 26 pl               | 370 ml                | 12 kHz                      |
| <b>6</b>   | Q2356A            | Blue 2242 Pigment Bulk Ink supply, 350 ml  |                   | ~              |               | ۵                   | Blue         | Pigment     | n/a                 | Up to 800 ml          | n/a                         |
| <b>666</b> | Q2357A            | HP Non-fluorescent Red Bulk Printhead and Connector<br>Assembly                        | ✓                 |                |               | ۵                   | Red          | Pigment     | 29 pl               | Up to 800 ml          | 12kHz                       |
| <b>\$</b>  | Q2358A            | Non-Fluorescent Red Bulk Ink supply, 350 ml  |                   | ~              |               | ۵                   | Red          | Pigment     | n/a                 | Up to 800 ml          | n/a                         |
| <b>1</b>   | Q2382A            | Blue 2242 Pigment Printhead and Connector Assembly                                     | $\checkmark$      |                |               | ۵                   | Blue         | Pigment     | 29 pl               | 29 ml                 | 12 kHz                      |

💫 Color 🛛 💧

Black

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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<br>number |       | Product name                                   | Single-use/<br>Bulk | Aqueous/<br>Solvent | Smart<br>Card | Description  |
|-------------------|-------|--|---------------------|---------------------|---------------|--|
| 1825-0057         |       | OEM ASIC Control Chip for Printers             | Single              | <b>\$</b> \$        |               | Use when you want the flexibility to design your own driver board, while leveraging<br>HP's tested firing parameters.  |
| 5182-6837         | -     | HP51645A Pen Cartridge Wiper                   | Single              | <b>\$</b> \$        | √             | The pen cartridge wiper is part of the service station and is used to wipe the nozzle<br>plate to remove any debris that could obstruct the nozzles or affect the ink drop<br>trajectory.  |
| 5182-6838         | 9     | HP51645A Pen Cartridge Cap                     | Single              | <u>As</u>           | $\checkmark$  | 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              | <b>A</b> \$         | ~             | Replacement latch for the CQ803A Print Cartridge Stall .   |
| C4557-60105       | 10    | HP5164A Pogo Pin Connectors                    | Single              | <b>A</b> \$         | ~             | Pen cartridge cap, used to cover the pen cartridge orifice plate when not in use to avoid evaporation.   |
| C6166-80001       | 0     | HP51645A Ribbon Cable                          | Single              | <b>A</b> \$         | ~             | Ribbon cable for interfacing the host printing system to the C8855M<br>Driver Board.   |
| C8855M            | - I R | HP OEM Pen Driver Board                        | Single/ Bulk        | × 👌                 |               | This printed circuit assembly (PCA) provides both the electrical and logical interface<br>between the host printing system and the printhead. This component is designed<br>to provide proper operation, proper firing, and protection of the printhead.<br>Communicates with the host via a serial data interface.                |
| CQ801B            |       | OEM Host Printer Smart Card Compnt R.2         | Single              | <b>A</b> \$         | $\checkmark$  | Host printer smart card, used by the host printing system to provide authentication of genuine HP pen cartridges and supplies.   |
| CQ802A            | N.    | OEM Smart Card Print Crtrg Driver Board        | Single              | <b>\$</b> \$        | $\checkmark$  | This printed circuit assembly (PCA) provides both the electrical and logical interface<br>between the smart cart print head and the host printing system. This component is<br>designed to provide proper operation, proper firing, and protection of the printhead.<br>Communicates with the host via a serial data interface.    |
| CQ803A            | J     | OEM Smart Card Print Cartridge Stall           | Single/ Bulk        | <b>\$</b>           | $\checkmark$  | Supports of the stall for easy replacement a 0.5-inch swath width and 600 dpi.<br>Suitable for varied printhead array configurations. Printheads can be snapped in and snapped out.  |
| 5042-7013         | ÷     | HP Male Fluid Connector                        | Bulk                | ۵                   |               | These ink connectors are specially designed to quickly disconnect for easy system<br>operation. The no-drip design helps maintain a clean operating environment, and<br>air-tight seals prevent air from entering the system when they are connected or<br>disconnected.   |
| 5042-7014         | ŝ     | HP Female Fluid Connector                      | Bulk                | ۵                   |               | These ink connectors are specially designed to quickly disconnect for easy<br>system operation. The no-drip design helps maintain a clean operating<br>environment, and air-tight seals prevent air from entering the system when they<br>are connected or disconnected.   |
| 5042-7015         | ÷     | HP Male Panel Mounted Fluid Connector          | Bulk                | ۵                   |               | These ink connectors are specially designed to quickly disconnect for easy<br>system operation. The no-drip design helps maintain a clean operating<br>environment, and air-tight seals prevent air from entering the system when they<br>are connected or disconnected.   |
| F0L72A            | EM    | OEM Valve for Bulk Crtg                        | Bulk                | <b>AS</b>           |               | Valve assembly used to attach the print cartridge to the tubing.   |
| Q2308-60001       |       | HP OEM Enclosed Regulator Assembly             | Bulk                | ۵                   |               | 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. |
| F0M04A            | -     | HP Bulk Ink Cartridge 50-meter Tube            | Bulk                | \$                  |               | HP's solvent ink capable tubing helps to establish secure connections between ink cartridges.  |
| FOL93A            | Un    | HP Bulk Print Cartridge Connector<br>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<br>Assembly | Bulk                | <b>A</b> \$         |               | Includes connector assembly, ink seal assembly, and ink stall . Use with 350-400 ml supplies.  |
| <b>FOM03A</b>     | to    | HP Bulk Print Cartridge 25-meter Tube          | Bulk                | \$                  |               | HP's solvent ink capable tubing will help establish secure connections between ink<br>cartridges.  |

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