

HP 2040 22mm Printhead



Wider-swath, high-speed HP aqueous printhead for your coding and marking needs



Step into a wider world of possibilities for coding and marking

The HP 2040 22mm Printhead supports the needs of high-volume printing applications that demand high speed and high-resolution coding.

- Print 1D and 2D bar codes — Up to 22 mm (0.87 in) in size with one printhead.
- Print large bar codes and large characters with multiple printheads in a staggered configuration.
- Print high-resolution variable data at high speeds — Up to 150 m/min.
- Minimize operator interventions and reduce total cost of ownership (TCO) with the new, large 775 ml size ink cartridge.
- Select the best HP ink for your printing application — use the HP 2040 Extra Black Ink Cartridge or the HP 2041 Fast Dry Black Ink Cartridge.

Excellent solution for printing variable data for anti-counterfeit, track and trace, and marking needs

The high print quality capability of the HP 2040 22mm Printhead is a great fit for a variety of applications, such as secondary and primary packaging, pharmaceutical labels, pharmaceutical cartons, secondary box label replacement, variable data document printing, and pattern printing

Versatile printhead

The HP 2040 22mm Printhead works with two HP branded aqueous inks and can print high-resolution images and variable data at high speeds up to 180 m/min (600 ft/min). In addition, the long throw distance up to 10 mm¹ enables flexibility of printhead positioning on the production line.

High-throughput production and reliable bar code printing

The HP 2040 22mm Printhead achieves the highest level of bar code scores at high printing speeds, as well as the required readability on multiple devices, from a cell phone to a handheld unit.

Ease of integration and replacement

Easily integrate the printhead into the OEM system and configure it to the application needs. The printhead and the ink cartridge can be replaced in minutes without specific operator training, allowing seamless continuation of production.

¹ Up to 7mm for small text and 10mm for large text at higher printing speeds.



Design flexibility

With built-in pressure regulation in the printhead, the printing system can be gravity fed or pressurized. One or several 775ml ink cartridges can be connected to multiple printheads at once to meet production needs. Horizontal and vertical position printing capability provides flexibility for a range of applications.

Competitive cost of ownership (TCO)

The large 775 ml ink cartridge and printhead offer a strong alternative to competing technologies, while retaining key benefits of HP Thermal Inkjet Technology, such as the ease of replacement, and low cost.

Additional components offered

- Modular Ink Supply Station — Provides easy insertion of the ink cartridge and proper electrical, mechanical, and fluidic connection.
- Tubing — Helps to establish a secure connection between the ink and print cartridge.
- HP Printhead Driver Daughter Card — Best-in-class, HP firing system component that simplifies the control and management of two printheads and their Smart Cards, and is an integral part of the overall security solution.
- HP IDS Daughter Card — Best-in-class, HP IDS component that controls two ink cartridge Smart Cards and is an integral part of the overall security solution.
- HP Printhead Fluidic Interconnect, Wiper and Cap – Printhead components that enable ease of use.
- HP Air Purge Cap — For quick and easy system set up.
- HP Development Kit — Includes the components needed to quickly demonstrate solution options and explore design choices.

Technical specifications

	Printhead	Ink cartridge
Resolution	Up to 2400 dpi	N/A
Nozzle count	4224	N/A
Maximum fluidic frequency	18 kHz	N/A
Approximate drop volume	6 pl	N/A
Ink fill level	N/A	775 ml
Operating conditions	15°C to 35°C (59-95°F), 20 to 80% RH	15°C to 35°C (59-95°F), 20 to 80% RH
Shipping/storage conditions	-10°C to 25°C (14-77°F), 0 to 100% RH	-10°C to 25°C (14-77°F), 0 to 100% RH
Altitude	Up to 4267.2 m (14,000 ft)	Up to 4267.2 m (14,000 ft)

Print speed vs print resolution specifications

Vertical DPI	Horizontal DPI	# of Columns enabled	Media Speed	Fluidic Firing Frequency
1200	300	4	1200 ft/min (365 m/min)	18
1200	450	4	800 ft/min (240 m/min)	18
1200	600	4	600 ft/min (180 m/min)	18
1200	600	4	500 ft/min (120m/min)	12

Ordering information

Components

Product number	Product description	Product number	Product description
W3S93A	HP 2040 22mm Printhead	W3T09A	HP IDS Daughter Card
W3S94A	HP 2040 Extra Black Ink Cartridge (775ml)	W3T01A	HP Printhead Fluidic Interconnect
3UB41A	HP 2041 Fast Dry Black Ink Cartridge (775ml)	W3T02A	HP Printhead Wiper
CV102A	HP Modular Ink Supply Station	W3T03A	HP Printhead Cap
W3T08A	HP Printhead Driver Daughter Card	W3T04A	HP Air Purge Cap
FOM04A	HP Bulk Ink Cartridge 50-Meter Tube		

Learn more at
hp.com/go/oeminkjet

