P2-TEX

High Speed Industrial Digital Printer
Primarily Used For **Apparel** and **Home Textile Fabrics**



POWER IN QUANTITY
POWER IN QUALITY

Mass Production and Premium Quality Beyond Limits.

Leveraging dual-beam and dual-linear motor driven technology,
Multi Pass Digital Printing configuration contribute to excellent stability and precision.
Equipped with up to 144 industrial print heads, with a daily output exceeding 80,000 m^2.

Innovative mirror-array print head configuration, combined with excellent printing precision.
Accurately restores the delicate texture and rich color layers of fabrics.
Widely suitable for scenarios such as home textile fabrics and clothing fabrics.
Efficiently meeting the needs of mass production and high-quality printing.



Up to 144
print heads

Up to 80,000m²
daily productivity

Up to 12
color channel

Mirror-array
Printing Tech

Applicable Fabrics: All types of natural fibers, artificial fibers, nylon, and chemical fibers, etc.



*Based on 3200 mm printing width

Features

- Features a high-scale print head configuration for digital printers, supporting up to 144 print heads.
- Mirror-Array Printing Technology enables mass production.
- Max 12-color configuration enables infinite colors.
- Dual beam and dual linear motor driven tech delivers best performance of both stability and precision positioning.
- Up to 3200 mm printing width with flexible single to triple roll switching.
- Full ink circulation system & constant-temperature control automatically adjust to ambient and printhead temperatures, ensuring jetting stability.

Application	
Apparel	√
Home Textile	√
Outdoor Sportswear	√

Ink Types	
Reactive Ink	√
Acid Ink	√
Disperse Ink	√
Pigment Ink	√

*For more details, please contact DPI



*P2-TEX & Heating Room

A Fabrics Feeding System

Featuring a quickly segmented (detachable) feeding system, it greatly facilitates the transportation and installation processes. Equipped with a multi-purpose fabric feeding structure, integrating fabric spreading, centering, and control devices, it can be widely adapted to various textile fabrics.

B High Speed Digital Textile Industrial Printer

With a printing width of 2000–3400mm and flexible single-to-multi-roll switching, it handles diverse production tasks effortlessly, adapting to both small-batch customization and large-scale mass production. It delivers delicate, vivid prints on various textiles including natural fibers, man-made fibers, nylon, and polyester.

C High-Efficiency Heating Room

Through a symmetrical cyclic air duct design and a precise temperature control system, the temperature deviation in each area inside the oven is controlled within in an extremely small range.

Printhead & Ink Supply System

- Industry-leading printhead capacity - supports up to 144 print heads.
- Printing width up to 3400 mm with flexible single to triple roll switching, balancing high-volume production & customization.
- Ink circulation system enables automatic circulation in standby, effectively preventing printhead drying.
- Ink constant-temp system intelligently adjusts to ambient & print head temp to stabilize ink conditions.
- Supports partition control nozzle voltage adjustment to precisely control color variation.
- Mirror-array printing tech ensures consistent color sequencing in bidirectional printing, enhancing print color uniformity.

Flexible Printing Mode Switching

- Supporting flexible switching between single / triple roll printing modes.
- Balances the flexibility of production and the benefits of mass production, precisely matching diverse order requirements.

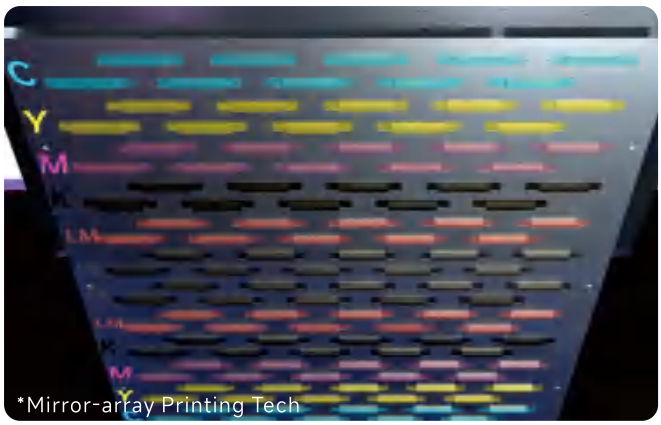
Abundant Colors Solutions

- Abundant ink solution options, supporting flexible multi-color configurations, deliver prints with delicate gradient color and brilliant rich color.
- Achieves smooth color transitions via precise color control, ensuring accurate presentation of high-saturated colors.

C Cyan
M Magenta
Y Yellow
K Black

Optional Color

Orange
Blue
Purple
Red
Green
Light Black
Light Cyan
Light Magenta



*Mirror-array Printing Tech


*Triple Roll Printing Mode







*Double Beam Design



*Multiple Protection Devices

Double Beam Design

- Cutting edge dual beam technology with dual linear motor driven tech ensures high stability and precision.
- Multi-protection monitoring detects wrinkles/overlaps, abort the carriage instantly to prevent printhead collision.
- High-standard belts & transmission components are made of high-standard materials for precise printing.

Software & Electronic Control

- Accurate waveform files for accurate color reproduction.
- High-precision conveyor with accurate stepping transmission control ensures precise printing.
- Integrated unique feathering mode, customized feathering setup to reduce the overlap problems.

Multiple Protection Devices

- Multiple protection devices enable real-time monitoring. When wrinkles or overlaps are detected, the carriage movement will be immediately stopped to prevent print head collision.
- Equipped with safety devices, adding an extra layer of protection for the carriage to more effectively safeguard the printhead.

Specification
Inline Integrated Fabrics Feeding System A-Frame Rack Optional · Integrated fabric feeding · External fabric feeding with A-frame rack
Fabrics Winding System · Plaiter Folding · Surface winding · Pneumatic shaft winding
Drying Room · Industrial drying room (2-6 sections). · Symmetrical circulating air duct design, · Multiple heating methods: Electricity, Natural gas, Thermal oil, Steam.

Belt Washing System

- Belt washing system with automatic real-time water spraying, ensuring effective belt cleaning whilst conserving water.
- Equipped with double brush rollers, sponge rollers, air blade, water-absorbing rollers and drying system, effectively ensures the stickiness of the belt.
- The scraper can flexibly adjust the angle according to the actual cleaning effect.



*Fabrics Feeding System


*Belt Washing System

High-Efficiency Heating Room

- Symmetrical circulating air duct design, 3-layer fabric threading mode.
- Multiple heating methods: electricity, natural gas, thermal oil, steam, etc.
- Adopts a multi-section heating room design, which is flexible and configurable to accommodate different production needs.


*Operation Console


*Ink Circulating System



Technical Data

Model	P2 XL
Print head	Kyocera KJ4B EX600-RC
Max printing width	3400 mm
No. of print head	96 ~ 144
Colors channel	8 ~ 12 Colors
Resolution	600~2400 dpi
Drop size	5~18 pL*
Height of platform	1120 mm
Air	0.6 Mpa
Power supply	Three phase 5 wires 380V
Power	50 KW
Dimension (L×W×H)	8000×8600×2600 mm
Weight	21,000 kg

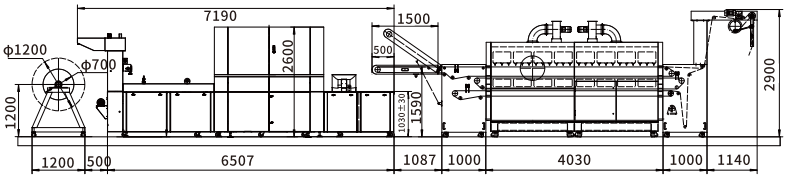
Based on 3200 mm printing width			
		P2 XL-96 (12×8)	P2 XL-144 (12×12)
Resolution (dpi)	No. of printing pass	Printing speed @m/h	Printing speed @m/h
508×600	1	1088	970
508×1200	2	598	533
600×600	1	957	853
600×1200	2	526	469

*Bidirectional printing speed is for reference only; the actual speed depends on on-site production performance. Specifications are subject to change due to upgrades, without prior notice.
*Drop size varies, resulting in corresponding differences in printing speed.



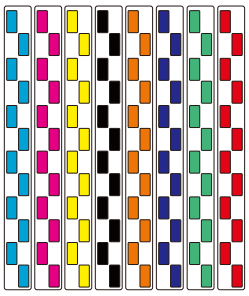
*8-12 Colors
96 / 144 Print heads
*Additional colors
available for customization

P2-TEX Layout

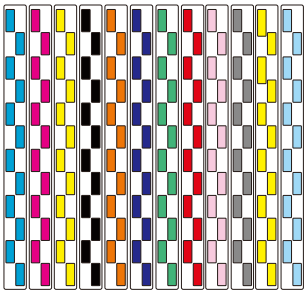


*Dimensions are for reference only; actual size per product.

12 Rows / 8 Colors



12 Rows / 12 Colors



Making Industry Smarter!

DPI is a global technology enterprise, specializes in the R&D, manufacturing, sales, and service of high-speed industrial digital inkjet printers. DPI delivers innovative digital printing solutions to diverse industries such as ceramics, building materials, textiles, and packaging. For more information, please visit www.dpi-t.com