SPECIFICATIONS

HandTop

Model	HT2512UV	HT2518UV	HT3020UV	HT3116UV	HT3200UV	HT5000UV
Print head	Kyocera	Kyocera	Kyocera	Kyocera	Kyocera	Kyocera
Print head quantity	10 pcs (Symmetrical array)	10 pcs (Symmetrical array)	10 pcs (Symmetrical array)	10 pcs (Symmetrical array)	10 pcs (Symmetrical array)	8 pcs (Symmetrical array)
Resolution	1200*1200dpi				726 * 2400dpi	
Print speed — Draft	100㎡/h	117㎡/h	140㎡/h	130㎡/h	155㎡/h	192㎡/h
Print speed — Production	78㎡/h	80㎡/h	95㎡/h	90㎡/h	116㎡/h	140㎡/h
Print speed — Quality	56㎡/h	58㎡/h	75㎡/h	70㎡/h	86㎡/h	93㎡/h
Printing mode	Uni-direction & Bi-direction					
Max dimension	2.5m * 1.22m	2.5m * 1.8m	3.05m * 2.05m	3.05m * 1.5m	3.2m	5.0m
Max thickness	100mm				50mm	2.0mm
Media	Various types of sheets and roll materials					
Ink type	Eco-friendly UV curing ink (voc free)					
Color configuration	C、M、Y、K、Lc、Lm、W、V					
Input format	Adobe Postscript Level3、PDF、JPEG、TIFF、EPS、AI					
Machine size (L*W*H)	4.67m*2.51m*1.38m	4.67m*3.03m*1.38m	5.22m*3.24m*1.38m	5.22m*2.71m*1.38m	6.19m * 1.59m * 1.56m	8.88m*2.03m*2.02m
Net weight	1150KG	1300KG	1520KG	1450KG	2260KG	6300KG
Gross weight	1745KG	2000KG	2330KG	2160KG	3130KG	8170KG
Power	8.3KW(20A)				9.0KW(20A)	11.1KW(25A)
Power supply	400VAC.50Hz 3P/N/PE					
Certificate	CE, FCC					
RIP software	Caldera					
Curing	LED lamp					
Data transmit	High-speed PCIE					
Environment	Seperated workroom in good cleaning and ventilated condition, avoid direct sunlight. Temperature: 18°C − 30°C(64°F-86°F) Constant Humidity: 30%-70%					

Handtop high-speed double row Kyocera application

Available flatbed models

- HT2512UV
- HT2518UV
- HT3116UV
- HT3020UV

Available hybrid and roll to roll models

- HT3200UV（Hybrid）
- HT5000UV（Roll to roll）

Top level UV printing productivity from Handtop

Kyocera print head is the largest and fastest print head all across the world. By the application of double row symmetrical solution, Handtop elevates the efficiency of Kyocera heads to another level. This application allows the productivity of UV printing to reach the top level within the industry by just adding a few print heads, which is a miracle of high-speed and high precision printing in advertising industry.

- The productivity on HT3116 flatbed printer from Handtop has reached 90m2/hr in 6pass, as well as a fine-art printing quality. This is belong to the top level speed.

- This application allows us to use less print heads. When white printing is required, customers can choose maximum 10 Kyocera heads, the minimum quantity is 5 Kyocera heads.

- Fine-art printing without curing bandings and pass bandings, this is not the only feature of symmetrical application. Moreover, the improvement of printing colors.

- Handtop first applied 8 heads of double row symmetrical application on HT5000 model in 2016, which presented fine-art printing effect.

Breakthrough against advertising printing productivity limits

In advertising printing industry, precision and quality are the eternal pursuit. But productivity is the ultimate weapon to win the game. By the full use of Kyocera dual channel print heads, Handtop researched the symmetrical double row application. Using 5 heads to boost the productivity of CMYK+W configuration. With a carriage speed up to 1.5m/s and bi-direction printing, under same print head quantity, the white printing speed doubled as normal staggered solutions.[1]

Take HT3116UV model as an example, under production mode, the productivity is up to 13,000 m² per week. For HT5000RTR, it will be 21,000 m² per week when printing full format of roll material.[2]

Fulfill fine-art printing requirements

In digital printing, the curing bandings, pass bandings and color bandings caused by color aberration are always headache for most advertising printing service providers. But all these problems are solved by the symmetrical double row Kyocera application.

Through reverse color coverage and more efficient color registration, the output presents more vivid color performance and high reduction of the original images.

In this application, Handtop optimized the calculation of random pick up in screen, along with the symmetrical color coverage, free from the disturb of all kinds of bandings.

The match of curing efficiency with the printing speed and inkjet density are the key point of realizing high speed printing. Handtop uses self-developed high power LED lamp in this solution. The power density is 2-3 times against normal LED lamps. Featured as low heat, fast response, long last lifetime and better focus, this ensured the curing performance under high speed printing.

Technology upgrade

Digital printing is never an easy task, Handtop Tech managed to accomplish some upgrades on digital technology to adapt for higher printing speed and output quality in the symmetrical double row Kyocera system.

For realizing higher efficiency in the data processing ability, we upgraded the Kyocera print head control board which boost enough capacity to process continuous image data under high speed bi-direction printing. The improvements on the PCIE module contributes a more stable data transmitting.[3] Independent carriage function control boards with modularized circuit design presents more flexible and smoother hardware control.

Besides, Handtop upgraded the motion parts such as carriage, parts on the beam and equipped with linear motor to support a better performance for higher speed and high precision movement.

Find Handtop service all around the world

Through professional and comprehensive after-sales service, we ensure all of our customers an excellent using experience with Handtop machine and improvement on business profitability. At present, Handtop service has service sites all over China, our service network covered over 50 countries and regions, capable of providing services include but not limited to operation training, maintenance, technical support, technique consultant, software upgrades and remote support, etc.

[1] We conclude from the comparison of Handtop double row stagger array and the previous speed.

[2] Handtop devices support continuous operation of 7*24hr, this test result fully considered the realistic cost of time for operation and media loading process.

[3] The upgrades of applications in data transfer module is in the 5 color symmetrical array.

Handtop UV ink is VOC free and been certified by SGS heavy metal standards subjected to EN71 regulations. Can be applied to toys level safety applications.

Grey-scale printing can save ink as well as more exquisite output contributes to fine-art printing. Handtop developed multi-level grey-scale inkjet printing technology with Kyocera heads and applied this technology to all kinds of applications, including double row symmetrical array.

Invariable dot

Variable dots

Handtop bi-direction printing technology

Bi-direction printing will double the productivity of the equipments, save time cost for the customers. With self-developed software calculation, perform high precision control of the jetting route, strength and frequency, as well as the improvements in the anti-interference ability to ensure the accurate position of every ink drop.

Self-developed high power LED lamp

Massive ink density in the double row application needs high power LED curing to ensure the printing performance. The curing power of Handtop self-developed LED lamp is 9w/cm² which is 2-3 times of normal LED curing lamps. By the software control, the power can be adjusted from 0-100% range to adapt to different printing modes.

Deep digital technological research

Handtop fully comprehends core technologies including dimensions of hardware, software, mechanical design, ink and applications. Leading industrial digital inkjet applications by the development of hardware and software control systems. Original industrial mechanical design elevates the printing precision, efficiency, stability and using experience. Self-developed ink and applications, development of techniques and solutions boost digital printing to adapt to wider range of application environments and various types of substrates.

Wider range of applications

You can use Handtop symmetrical double row Kyocera application on substrates such as advertising roll material, signage rigid panels and interior decoration materials. You can always find one type of model to satisfy your business requirements in many models that available for this configuration, and create more value for you.