

Press information

KYOCERA Develops Real Edge 600dpi Thermal Printhead for Card Printing with Enhanced Security Applications

Proprietary design enables printing directly onto ID and credit cards

Kyoto, Japan / Neuss, Germany, August 02, 2016 – Kyocera Corporation (President: Goro Yamaguchi) announced the launch of a real edge 600-dot-per-inch (dpi) thermal printhead for desktop card printers used for rigid materials such as ID cards and credit cards. The KPE Series 600dpi printhead, available worldwide from this month, provides crisp, high resolution printing with delicate color expression.

The new 600dpi model is fully compatible with the conventional 300dpi printhead design enabling an easy upgrade for existing printer designs.

Kyocera has mass-produced thermal printheads for card printers since 1993 enabling simple, fast and high-resolution printing of a wide range of cards including ID cards and credit cards. The company currently holds the world's largest market share in printheads for desktop card printers*.



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KPE Series 600dpi Thermal Printhead

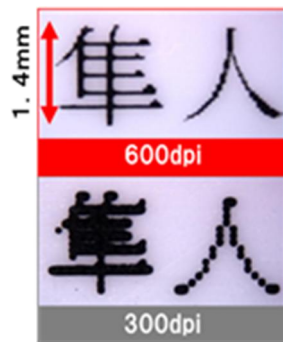


Image of printed characters

Model	KPE Series 600dpi
Application	Desktop card printers
Production Facilities	Front-end process in Kagoshima Hayato Plant (Japan) Back-end process in Nagano Okaya Plant (Japan)
Start of Production	July 2016 (upon request)
Production Target	15,000 units/year

Development Background

In recent years, the demand for ID and credit cards with high-resolution photos or stealth characters has grown along with the need to ensure security. More companies are utilizing cards with

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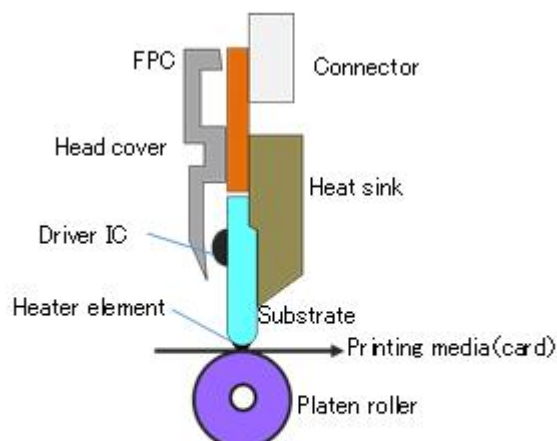
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photos for employee and customer management; and compact, simple card printers capable of instant issuance in-house are becoming mainstream among retail stores. In recent years, the demand for such cards is growing not only in Japan, the U.S. and Europe, but also in China and India. The new Kyocera KPE 600dpi Series allows users to print with delicate color expression and high resolution.

Product Features

1. Kyocera's proprietary real edge design

Kyocera's printheads for card printing feature a real edge design that enables printing without bending the media in order to print on rigid materials such as plastic. A proprietary innovation, Kyocera's printheads place the heater element (head which prints images) on the thin edge of a substrate so that the media does not have to bend.



**Kyocera's proprietary
real edge design**

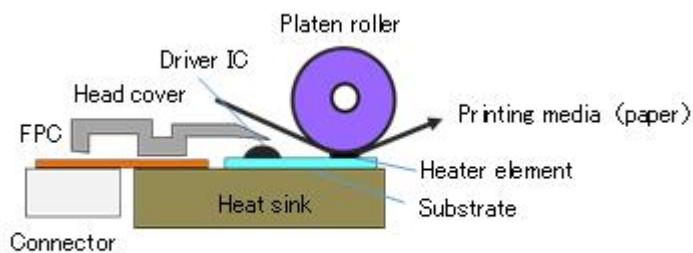
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General flat-type design

2. Delicate color expression and high-definition character printing

The new product employs high-density pattern wiring, which places the heater of the head for printing at a pitch of 42µm. Furthermore, based on the establishment of a manufacturing technology for photolithography processing which enables this high-density wiring, the product achieves a high resolution of 600dpi.

3. Easy upgrade for existing printer designs

Since the new product features the same size as Kyocera's conventional 300dpi printhead and ensures compatible input signal arrays, printer manufacturers can easily design high-resolution

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600dpi card printers while making use of existing printer designs.

*Based on research by Kyocera (as of June 2016)

For more info about Kyocera Printing Devices, please visit:

<http://global.kyocera.com/prdct/printing-devices/index.html>

For more information about Kyocera: www.kyocera.eu

About Kyocera

Headquartered in Kyoto, Japan, Kyocera Corporation is one of the world's leading manufacturers of fine ceramic components for the technology industry. The strategically important divisions in the Kyocera Group, which is comprised of 235 subsidiaries (as of March 31, 2016), are information and communications technologies, products which increase quality of life, and environmentally friendly products. The technology group is also one of the oldest producers of solar energy systems worldwide, with more than 40 years of experience in the industry.

The company is ranked #531 on Forbes magazine's 2016 "Global 2000" listing of the world's largest publicly traded companies.

With a global workforce of over 69,000 employees, Kyocera posted net sales of approximately €11.59 billion in fiscal year 2015/2016. The products marketed by the company in Europe include printers, digital copying systems, microelectronic components, and fine ceramic products. The Kyocera Group has two independent companies in the Federal Republic of Germany: Kyocera Fineceramics GmbH in Neuss and Esslingen and Kyocera Document Solutions in Meerbusch.

The company also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by

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Kyocera founder Dr. Kazuo Inamori — to individuals and groups worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (converted at approximately €360,000 per prize category).

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