Print Sample

**Overview**

For **INDUSTRIAL DESIGN**

High-Performance Flatbed UV Inkjet Printer

**UJF-7151plus**

**High Quality**

Astonishingly high-quality and high-accuracy printing

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**Specifications**

- **Print Head:** On-demand piezo head
- **Print Resolution:** 600dpi (DPI), 1200dpi (2500dpi)
- **Type:** UV variable ink, UV-100, UV-100, UV-300 / MUR-100, MUR-300
- **Color:** 20 colors, 30 colors, 60 colors
- **Package size:** 200mL bottle (UV-100, UV-100, UV-300), 500mL bottle (UV-100, UV-100, UV-300, PR-300)
- **Power supply:** Single-phase, 100 - 240V, 50 / 60Hz
- **Power consumption:** 120W (average)
- **Environmental conditions:** Temperature: 15 - 30°C (50 - 80°F), Humidity: 35 - 65%RH

**Supplies**

<table>
<thead>
<tr>
<th>Item</th>
<th>Item No.</th>
<th>Quantity</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>UJF-100</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>UJF-100</td>
<td></td>
<td></td>
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<tr>
<td>UJF-300</td>
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<td></td>
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<tr>
<td>UJF-350</td>
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</tbody>
</table>

**Options**

- **User manual:** English
- **Metals Target Color Emulator:** JCG-027
- **Metals Profile Meter 3:** SG-027

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**Inks and substrates:**

- Please refer to your local Mimaki representative for details on Mimaki inks and substrates for the best results.

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**Safety Notice:**

- Never apply ink to the printer head while power is on.
- Never use solvents or abrasive materials to clean the printer head.
- Never touch the printhead or print substrate while printing.
- Always use a Mimaki inkjet printer for the best results.

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**Mimaki Global Network**

USA: Mimaki USA Inc. [mimaki.com]
Brazil: Mimaki Brazil Comércio e Importação Ltda [mimaki.com.br]
India: Mimaki India Private Limited [mimaki.com.in]
Taiwan: Mimaki Engineering (Taiwan) Co., Ltd. [mimaki.com.tw]
Australia: Mimaki Australia Pty. Ltd. [mimaki.com.au]
Innovative Systems: PT. Mimaki Indonesia [mimaki.com.id]
China: Shenzhen Mimaki Trading Co., Ltd. [mimaki.com.cn]
High Quality
High Performance

Mechanical structure achieves high-precision printing

To reduce printer unit vibration, the print table moves during printing instead of the Y-bar. In addition, to achieve higher position accuracy, ball screws are installed on both sides of the table to assist with its movement. UJF-7151 plus offers high-performance printing that satisfies the position accuracy necessary for additional printing on preprinted surfaces. Furthermore, fine lines, edges, and small texts are clearly readable. UJF-7151 plus is the best digital on-demand printing solution for the screen printing industry.

Mimaki’s print technologies for achieving beautiful printing

- **Mimaki Advanced Pass System 4 (MAPS4)**
  Generally, swath boundaries are straight lines. Therefore, a slight misalignment between boundaries causes banding or uneven color printing. MAPS4 reduces banding and uneven color printing with blunted boundaries, similar to gradation printing.

- **Mimaki Fine Diffusion 1/MFD1**
  Bundled “Media, Media” RIP software contains MFD1(*1), an image noise reduction function. MFD1 reduces the noise that is generated in image data during image processing and enables the production of better print results without toner jumps or uneven colors.
  *1: MFD1 is available for Version 6.0 and higher. *2: Patent number: 53028418

- **Variable dot printing**
  Optimum droplet sizes are automatically selected from 6 pl to 30 pl for each print mode. Moreover, UJF-7151 plus can separately control droplet sizes for process color (CMYK) and spot color. This capability is useful for simultaneous double-layer printing. Small droplets are used for color printing to present a delicate finish, and large droplets are used for white-base-layer printing to obtain high opacity.

- **Nozzle Check Unit (NCU) automatically detects and recovers clogged nozzles**
  Clogged nozzles are detected automatically by sensors that monitor ink droplets. When clogged nozzles are detected, they are automatically cleared, reducing waste printing. Nozzles are checked per transfer file.

- **Nozzle Recover System (NRS) for maintaining productivity**
  If the defective nozzles are not recovered after being cleared through the NCU function, the NRS selects substitute nozzles and then restarts printing. This feature is a significant novelty because, previously, when nozzle cleaning failed, the printhead required repair by a technician; the printing operation therefore ceased until the printhead was repaired. The NRS(*2) allows the printer to continue printing without interruption by substituting non-defective nozzles for defective nozzles until the technician services the printer.

- **Reliable operating support package**
  Ink and media shortage, clogged nozzles, and other minor problems influence stable productivity. The UJF-7151 plus fully supports continuous printing with reliable technologies.

A new printhead ink-circulation system reduces nozzle failures.

The ink-circulation system in the head reduces ink settling and thus provides stable ink jetting (Fig. 1). In addition, this system removes air bubbles, which lead to nozzle failure (Fig. 2). Because of this function, the nozzle-cleaning frequency is reduced, and accordingly, cost-effective stable printing is achieved.

**Figure 1. Minimum comparison**

- **Maximum 4.21 m²/h ~ productivity**
  Six printheads are arranged in a staggered line to improve printing speed. The speed is approximately 1.8 times faster than that of our conventional model (*5). The printable area expands to 710 x 510 mm (28 x 20 in), enabling the printing of size 636 x 469 mm (25 x 18.5 in), which is often used for screen printing.

- **MIMAKI’s high-value added print with special color ink broadens the possibilities of business.**

**Metallic**

The MMC (Mimaki Metallic Control) is the system dedicated to metallic printing using Mimaki’s unique Surface Imaging Technology. The MMC printing technology that separately prints one type of metallic ink in gloss and matte tones. Using separately the beautiful glossy tone print like mirror finish and the matte tone print of metallic texture with suppressed gloss feeling will expand the range of expressions. Texture expression with embossing effect can be printed by changing ink jet concentration. The texture expression whose appearance changes according to the light reflection provides a higher level of performance appeal. Color metallic expression is possible by printing with colored ink on top of metallic ink. By combining the application of metallic, color and color metallic, high-quality design print can be available.

**Clear**

It is a clear ink that can give an additional value such as both gloss and matte tones, texture expression according to the application. UJF-7151 plus mounting system for clear print control, “MMC (Mimaki Clear Control)” allows the minimization of uncured time to prevent dust from sticking and to avoid bubble generating. It provides high-grade glossy representation and expressive embossing feeling with highly-concentrated clear to lead a fine and beautiful texture print.

**Primer**

It is an inkjet printer that improves the adhesion of materials such as resin, glass, metal and those surface-finished. Expanding the range of material selection, high value added applications can be produced.

**Print speed**

<table>
<thead>
<tr>
<th>Print mode</th>
<th>Resolution</th>
<th>Number of colors</th>
<th>Print speed [m²/h]</th>
<th>Print time per print table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft</td>
<td>600×600</td>
<td>6</td>
<td>4.21</td>
<td>5 m 10 s</td>
</tr>
<tr>
<td>High speed</td>
<td>600×600</td>
<td>8</td>
<td>3.14</td>
<td>6 m 55 s</td>
</tr>
<tr>
<td>Standard</td>
<td>600×900</td>
<td>10</td>
<td>2.56</td>
<td>8 m 30 s</td>
</tr>
<tr>
<td>High quality</td>
<td>1200×1200</td>
<td>12</td>
<td>1.57</td>
<td>10 m 15 s</td>
</tr>
<tr>
<td></td>
<td>1200×1200</td>
<td>16</td>
<td>1.53</td>
<td>13 m 50 s</td>
</tr>
<tr>
<td></td>
<td>1200×1200</td>
<td>16</td>
<td>1.16</td>
<td>14 m 10 s</td>
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<td></td>
<td></td>
<td></td>
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<td>18 m 40 s</td>
</tr>
</tbody>
</table>

Print speed: Measured speeds are common for single-layer printing (color or spot color single layer) and double-layer printing (color or spot color), except MIMAKI 1005. Device model: UJF-7151.