"Multi-Drop Jetting"

Features

- 8 level grayscale per dot with multi-drop jetting
- Accurate dot placement
- Oil based and UV curable ink available
- Stable jetting with water circulation thermal control (CA3)
- Minimum composition to build a wider print array module (CB1)

8 level grayscale multi-drop jetting

TOSHIBA TEC’s on-demand piezo electric inkjet printheads are designed for industrial applications with high print quality.

Unlike conventional binary printheads, this grayscale printhead technology of jetting multiple drops within one dot allows for an image to have 8 level grayscale, since each dot is created through a minimum of 6 pl to a maximum of 42 pl of ink. This enables the image to express near photo print quality.

Revolutionary single pass speed printing is achievable with its unique precise piezo process and driving technologies, offering accurate dot placement and jetting reliability.

Compatibility with both UV curable and oil based pigment ink allows printing on various types of substrate, both porous and non-porous.

The CB1 is a minimum composition for customers to combine them into a wider print array module.

The CA3 is packaged printhead with chassis which provides built-in water channel and complete sealing designed for easy temperature control.

\[ \text{pl = pico liter(s)} \]  \[ (10^{-12} \text{ liter(s)}) \]
## SPECIFICATION

<table>
<thead>
<tr>
<th>Specification</th>
<th>CB1</th>
<th>CA3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printable Width</td>
<td>53.6 mm</td>
<td></td>
</tr>
<tr>
<td>Number of Channels</td>
<td>318 / head</td>
<td></td>
</tr>
<tr>
<td>Resolution / Channel Pitch</td>
<td>150 dpi / 169 μm</td>
<td></td>
</tr>
<tr>
<td>Print Mode</td>
<td>Multi drop / 8levels (Standard)</td>
<td></td>
</tr>
<tr>
<td>Drop Volume</td>
<td>6.42 pl</td>
<td></td>
</tr>
<tr>
<td>Standard Frequency</td>
<td></td>
<td>[13.8 KHz]</td>
</tr>
<tr>
<td>@ 1drop</td>
<td></td>
<td>4.8 KHz</td>
</tr>
<tr>
<td>@ 7drops</td>
<td></td>
<td>[2.6 KHz]</td>
</tr>
<tr>
<td>@ 15drops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear Speed</td>
<td></td>
<td>[17 m/min ]</td>
</tr>
<tr>
<td>@ 1drop, 1200 dpi</td>
<td></td>
<td>24 m/min</td>
</tr>
<tr>
<td>@ 7drop, 3000 dpi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driving Voltage Ink</td>
<td></td>
<td>Oil based pigment ink / UV curable pigment ink</td>
</tr>
<tr>
<td>Weight</td>
<td>30g</td>
<td>148g</td>
</tr>
<tr>
<td>Dimensions</td>
<td>62(W) X 61(D) X 16(H) mm</td>
<td>85(W) X 70(D) X 23(H) mm</td>
</tr>
<tr>
<td>Cover</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Chassis</td>
<td>No</td>
<td>Ceramic Chassis with water channel</td>
</tr>
</tbody>
</table>

* pl = pico liter(s)
* Note: Phrase in parentheses is a reference value.
* Some ink may damage prinheads depending upon the chemical used.

It is strongly recommended that material compatibility test be carried out before use to obtain optimum print performance of the prinheads.

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### CB1

- **Dimensions:**
  - Width: 62 mm
  - Depth: 61 mm
  - Height: 14.5 mm

### CA3

- **Dimensions:**
  - Width: 85 mm
  - Depth: 80.8 mm
  - Height: 23.3 mm

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To ensure correct use of the product, be sure to carefully read the specifications and follow its instruction before use.

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**Disposal**

The HEAD must be disposed of after removing the INK according to applicable laws and regulation in each country.

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**Design and specifications subject to change without notice.**

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**TOSHIBA TEC CORPORATION**

Oval Court Ohsaki Mark East, 2-17-2, Higashi Gotanda, Shinagawa-ku, Tokyo, 141-8664 Japan

Phone:+81-3-6422-7742 Fax:+81-3-6422-7947

www: [http://www.toshibatec.co.jp](http://www.toshibatec.co.jp)