



StarFire SG1024 2C Aqueous Printheads

### Features:

- Two-color operation
- Robust and repairable construction
- Drop sizes ranging from 12 to 200 picoliters
- 1024 individually addressable jets
- Incorporates VersaDrop™ binary and grayscale jetting
- Continuous ink recirculation with RediJet™
- Removable/replaceable collar mounted nozzle plate

*The StarFire SG1024 2C Aqueous printhead family is a breakout inkjet innovation for high performance printing and decorative applications. It is purpose-built for today's demanding high-speed scanning and single-pass industrial system designs. It is an easy to integrate, high performance, drop-on-demand printhead for two-color operation at resolutions up to 200 dpi per color and interlaced for a 400 dpi swath. A robust and repairable construction makes it ideal for Textile, Wide Format and Commercial Printing and Decorating.*

Combining superior jetting performance with a high nozzle packing density in a compact, self-contained unit, the StarFire SG1024 2C Aqueous uses field proven materials to deliver a long service life with consistent and reliable output.

Each SG1024 2C Aqueous printhead has two separate ink paths each with 512 independent channels arranged in 4 rows in a single nozzle plate for resolutions up to 200 dpi per color with the SA and MA printheads. The LA-2Ci has a unique interlaced design can either be used as a single color/dual feed 400 dpi or two color/single feed per color 200 dpi. All 1024 nozzles can be fired simultaneously or individually.

Equipped with a singular, durable, collar mounted, coated metal nozzle plate to withstand abrasion and resist damage, it is removable for cleaning or replacement. The printheads have nominal 12-200 picoliter drop sizes with jetting fluids in the 8 to 20 centipoise range. When combined with VersaDrop technology, SG1024 2C Aqueous printheads can produce drop sizes ranging from 12 to 200 picolitres and full grayscale without penalty to productivity.

The StarFire SG1024 2C Aqueous is compatible with solvent, UV-curable, and aqueous based inks and maintenance fluids. Using RediJet technology, the SG1024 Aqueous 2C continuously recirculates inks through the printhead at the nozzle and refill chamber to increase open time, reduce downtime and improve startup, especially for highly pigmented and fast drying inks. RediJet allows StarFire printheads to be quickly and easily primed with minimal ink waste thereby increasing the inherent productive capacity of the printing system by reducing maintenance times and associated costs.

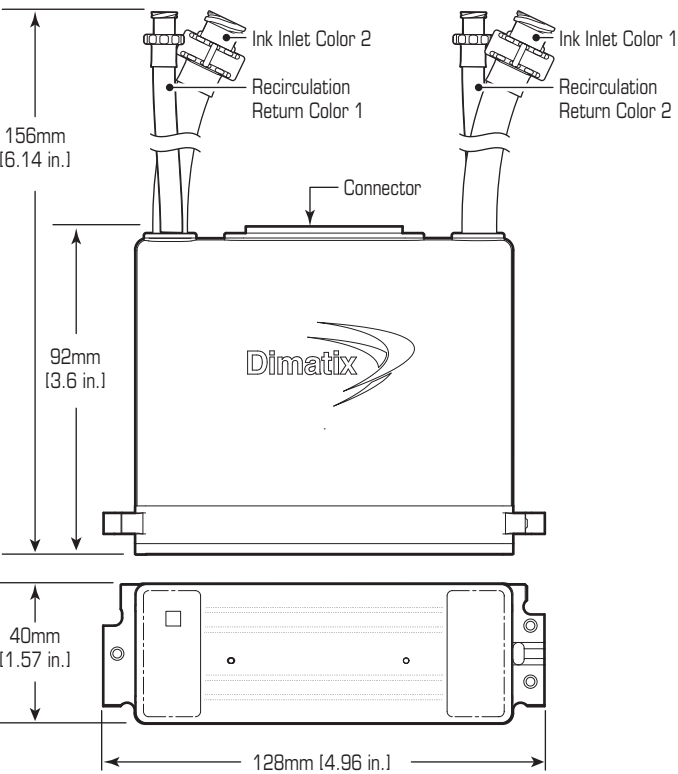
The StarFire SG1024 2C Aqueous printhead has simplified interfaces. The electrical interface consists of one 60-pin connector located topside for power, ground, data, control signals and fire pulse. Two fluid connections for each color channel facilitate easy priming, flushing and continuous ink recirculation and connect to an ink supply via Luer fittings.

Heating configuration includes an internal heater/thermistor for precise control of ink viscosity at temperatures up to 50°C. Precise registration points enable drop-in alignment with customer provided mounting features, reducing set-up and alignment costs during printhead replacement and also allow multiple printheads to be accurately arrayed into print bars for wide width, higher resolution and multi-color printing devices.

Parameter
Number of addressable Jets per module
Print width
Native resolution
Native drop size/largest drop size
Versadrop Max Productivity
Firing frequency
Inkjet operating temperature range
Nominal fluid viscosity
Compatible jetting fluids
Nozzle Plate technology
Printhead heat type
OEM accessible non-volatile memory
Integral temperature sensor

StarFire SG1024 2C Aqueous Printheads
1024
64.96 mm [2.55 in.]
See chart below
See chart below
See chart below
Up to 50 °C [122 °F]
8-20 cP (10-14 cP recommended)
UV-curable, organic solvents, and aqueous inks
Metal
Integrated heater, thermal transfer
64 byte rewriteable
Included

Physical Characteristics



StarFire SG1024 2C Aqueous Models

StarFire SG1024 2C Aqueous Models	SA 2C	MA 2C	LA 2Ci
Native Resolution	200 dpi per color	200 dpi per color	200 dpi per color and interlaced for a 400 dpi swath
Native Drop Size	12 pl	30 pl	80 pl
Largest Drop Size	33 pl	80 pl	200 pl
VersaDrop Max Productivity	600 ng-kHz with drop sizes between 12 and 33 ng	900 ng-kHz with drop sizes between 30 and 80 ng	1500 ng-kHz with drop sizes between 80 and 200 ng
Firing Frequency	Up to 50 kHz	Up to 35 kHz	Up to 20 kHz

Product data presented above are for guideline purposes only. For design and engineering work using this product, please contact Dimatix Technical Support for the appropriate Product Manual containing full Product Specifications.



**Corporate Office:**  
FUJIFILM Dimatix, Inc.  
2250 Martin Avenue  
Santa Clara, CA 95050  
USA

Tel: (408) 565-9150  
Fax: (408) 565-9151  
Email: info@dimatix.com

**New Hampshire Facility:**  
FUJIFILM Dimatix, Inc.  
109 Etna Road  
Lebanon, NH 03766  
USA

Tel: (603) 443-5300  
Fax: (603) 448-9870  
Email: info@dimatix.com

**Japan Office:**  
FUJIFILM Global Graphic Systems Co., Ltd.  
2-26-30 Nishiazabu  
Minato-ku, Tokyo 106-0031  
Japan  
Advanced Marking Strategy Division  
Phone: +81 3 6419 0530  
Fax: +81 3 6419 9840  
E-mail: dmp\_ffgs@ffgs.fujifilm.co.jp

**Europe Office:**  
Tel: +44 7739 863 505  
Fax: +44 870 167 4328  
Email: euro@dimatix.com

**Korea Office:**  
Email: mdkorea@dimatix.com

**Taiwan Office:**  
Email: mdtaiwan@dimatix.com

**China Office:**  
FUJIFILM Dimatix China Service Center  
Building 30, 1000 Jinhai Road  
Pudong New Area, Shanghai  
China 201206  
Email: china@dimatix.com

**Singapore Office:**  
Email: mdsingapore@dimatix.com

