



# STARFIRE® SG1024 C-Series

Designed for Ceramic Tile, Decorating,  
Glazing, Engobe, Glues, Enamels, and  
Structured Surfaces

The innovative FUJIFILM Dimatix STARFIRE SG1024 inkjet printhead is designed to meet the demanding needs of ceramic tile production. It is purpose-built for today's demanding high-speed scanning and single-pass industrial system designs. The STARFIRE family of drop-on-demand printhead simply integrates into high performance systems with print resolution up to 400dpi. It uses proven materials to deliver consistent output over a long service life with REDIJET® continuous ink recirculation. The printhead is fully repairable. It is equipped with a replaceable metal nozzle plate assembly that is designed to withstand abrasion and resist damage. The unit is compatible with multiple ink types including oil and solvent-based ceramic inks.

## Performance

- 400dpi resolution with drop sizes ranging from 6–200 picolitre that allow for optimal and efficient use of ceramic inks
- 1024 individually addressable jets
- Versadrop binary and grayscale jetting with open and editable waveform utility

## Productivity

- High ink laydown up to 50 grams per square meter at production speed demanding ceramic tile decoration.\*
- REDIJET® — Dual recirculation for reliable jetting & support fast system start-up to maximize uptime and return on investment
- Optional printheads enabling high flow ink recirculation for inks and glazes that need them.
- Enables robust system design for end user up-time and productivity

\*20kHz with 200pL drop using test (typical) fluid

## Durability

- Industrial capabilities that meet customer demands in the most difficult industrial environments
- Robust (repairable) design enabling cost-effective maintenance and support
- Reliably use challenging jetting fluids used for ceramic tile decoration

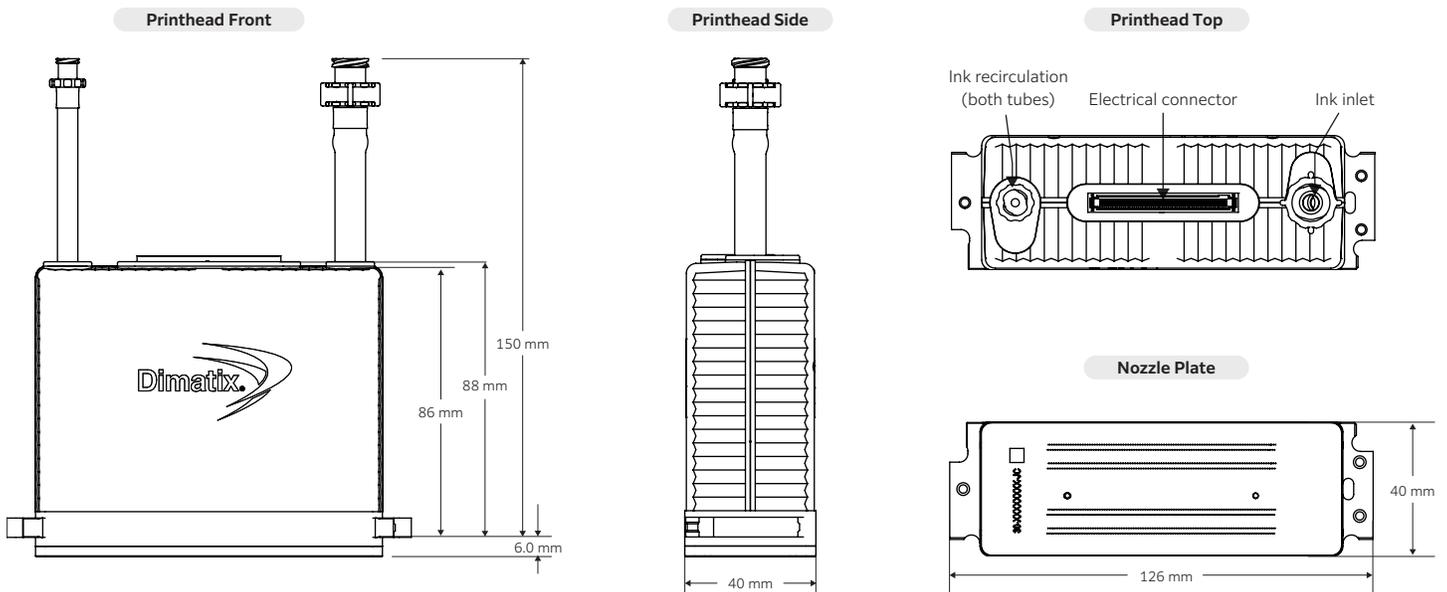
## Support

- Backed by industry-leading support organization
- Dedicated worldwide field organization to ensure successful product development
- Lab and quality assurance investigative team to ensure satisfaction with FUJIFILM Dimatix products through your product lifecycle

## Technical Specifications

STARFIRE SG1024	XSC	SC	MC	LC	MCHF	LCHF
Number of Addressable Jets / Module	1024					
Print Width (mm/in)	64.96 (2.55)					
Native Resolution (dpi)	400					
Firing Frequency (kHz)	50 / 18	50 / 18	30 / 12	20 / 8	30 / 12	20 / 8
Versadrop Max Productivity (ng-kHz)	300	600	900	1500	900	1500
Native Drop Size / Largest Drop Size (pL)	6 / 20	12 / 33	30 / 80	80 / 200	30 / 80	80 / 200
Nozzle Plate Technology	Metal					
Compatible Fluids	Oil & solvent based ceramic inks					
Viscosity Range (cP)	8–20 (10–14 for highest productivity)					
Temperature Control	Yes					
Inkjet Operating Temperature Range (C/F)	Up to 50°C / 122°F					
Integrated Temperature Sensor	Included					
OEM Accessible Non-volatile Memory	64-byte rewritable					

## Physical Characteristics



Product characteristics and depictions are not drawn to scale and are general illustrations only. Technical specifications above may vary based on usage conditions and overall system environment.

For design and engineering work using this STARFIRE printhead, please contact Dimatix Technical Support for the appropriate Product Manual containing full Product Specifications.

### FUJIFILM

**Corporate Office:**  
FUJIFILM Dimatix, Inc.  
2250 Martin Avenue  
Santa Clara, CA 95050  
USA  
Tel: 1 (408) 565-9150  
info@dimatix.com

**New Hampshire Facility:**  
FUJIFILM Dimatix, Inc.  
109 Etna Road  
Lebanon, NH 03766  
USA  
Tel: 1 (603) 443-5300  
info@dimatix.com

**Inkjet Business Division:**  
FUJIFILM Corporation  
7-3, Akasaka 9-chome  
Minato-ku, Tokyo 107-0052  
Japan  
Tel: +81 3 6271 3971  
dgi-ff-ijhead@fujifilm.com

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

**Europe Office:**  
euro@dimatix.com  
Korea Office:  
mdkorea@dimatix.com  
Singapore Office:  
mdsingapore@dimatix.com  
Taiwan Office:  
mdtaiwan@dimatix.com

[www.fujifilm.com/us/en/business/inkjet-solutions](http://www.fujifilm.com/us/en/business/inkjet-solutions)

PDS00159 Rev. 02 May 2024

FUJIFILM and the FUJIFILM logo, DIMATIX, STARFIRE and the STARFIRE logo, VALUE FROM INNOVATION and the VALUE FROM INNOVATION logo are trademarks of the FUJIFILM Corporation and its affiliates. © 2024 FUJIFILM Dimatix, Inc. All rights reserved.