

Product catalogue

GIS drive electronics for
FUJIFILM Dimatix Starfire®
SG1024 printheads



Overview

GIS electronics enable precise, scalable and reliable control of FUJIFILM Dimatix Starfire® SG1024 printheads using an direct architecture on the Ethernet platform. Designed for OEMs and machine integrators, the GIS solution combines compact printhead cards, high-capacity manager cards and the Atlas® software platform to accelerate development while ensuring production-grade performance.

Key Benefits

High-fidelity waveform control: binary, greyscale and multi-pulse with fine slew-rate and amplitude shaping.

Scalable system architecture: distributed Ethernet option.

Small form factor printhead cards designed for single head or large arrays.

Integrated safety and diagnostics: temperature monitoring, thermal cut-out and EEPROM readback.

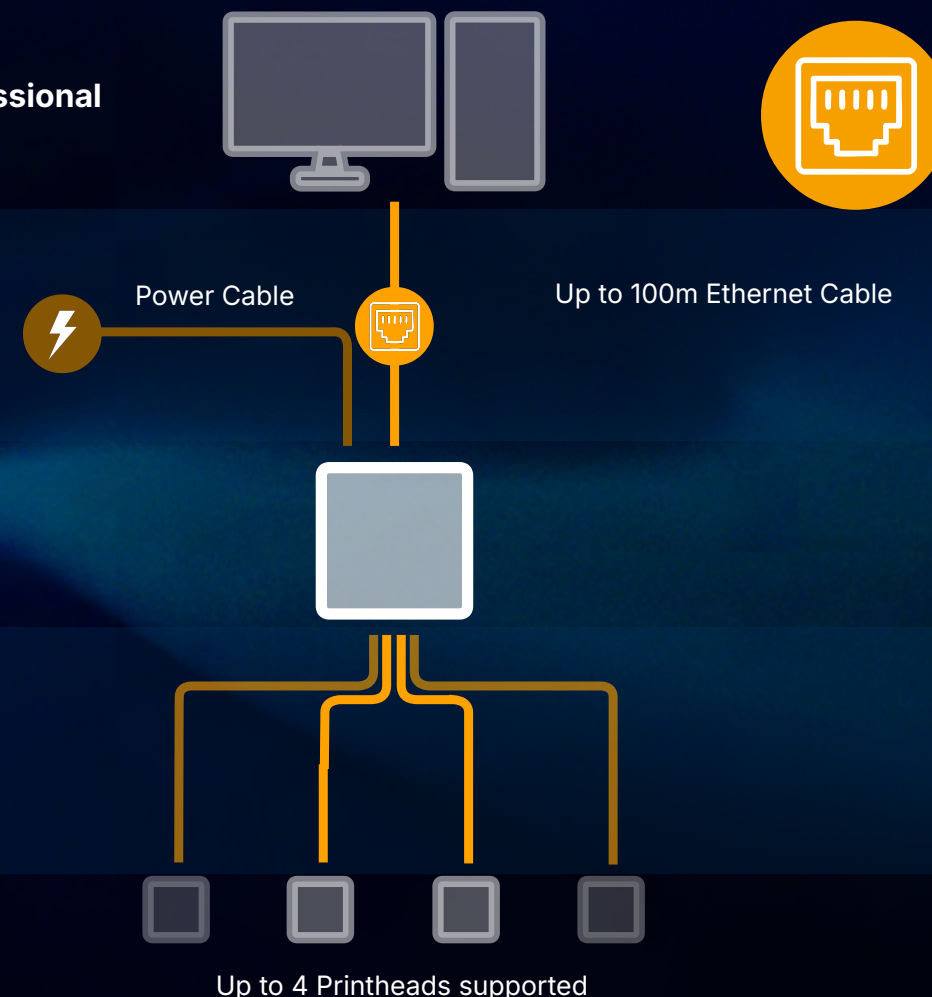
Seamless integration with GIS Atlas® software, Professional and Server.

Architecture Overview

GIS implements an direct architecture: the Printhead Card interfaces directly with the FUJIFILM Dimatix Starfire® SG1024 printhead, which also handles data distribution, synchronisation and power management. Systems can be configured on the Ethernet platform to suit throughput and scaling needs.

FUJIFILM Dimatix Starfire® SG1024 Printhead Manager (Direct) Configuration via Ethernet

PC, Print Server + Atlas® Professional



Printhead Manager
13005701

Printhead

Up to 4 Printheads supported



Signal Manager with Master Relay 1200607



Signal Relay E included in 13005701


Ethernet Platform

Printhead Card (Product code: 13005701); each card connects to 4 pieces FUJIFILM Dimatix Starfire® SG1024 printhead. The Ethernet platform supports distributed architectures and scaling via the Ethernet signal manager.

Supported printheads	FUJIFILM Dimatix Starfire® SG1024
Max printheads per card	4
Power supply	48V DC, 20A max
Dimensions (H×W×D)	240 × 128 × 18mm
Weight	229g
Waveforms	Binary, greyscale and multi-pulse
Monitoring & safety	Printhead temperature monitoring; thermal cut-out
Diagnostics	Printhead EEPROM readback
Cable length: PC → Manager	Up to 100m
Cable length: Manager → Printhead	400mm
Software compatibility	Atlas® Server, Atlas® Professional


Compatible Components

- Product detect / encoder signal manager modules.
- Ink delivery system components for controlled flow to FUJIFILM Dimatix Starfire® SG1024 printheads.



Type	Product codes	Max connected Printhead Cards	Notes
Printhead Manager (Ethernet)	13005701	Connects up to 4 Printheads	Base configuration

*Maximum achievable printheads may be limited by data rate, firing frequency and power consumption.


Connectivity & Cabling - Ethernet

Data:

- PC to Printhead Manager > Up to 100m
- Printhead Manager to Printhead > 400mm

Power:

- 48V DC to supply the Printhead Manager.

GIS Ordering Information

Speak to our experts for guidance on how to configure your system to your exact needs, the part codes for this example system are below.

Category	Product	Code
Printhead Manager (Ethernet)	FUJIFILM Dimatix Starfire® SG1024	13005701

GIS Notes & Disclaimers

- Specifications are subject to change without notice.
- Performance characteristics depend on system configuration, ink and operating conditions.
- All trademarks are the property of their respective owners. Atlas® is a registered trademark of Global Inkjet Systems (GIS).

Typical Applications

- Ceramics.
- Textiles.
- Graphics.

Software – Atlas® Platform

Atlas® is a software platform for the rapid development of industrial inkjet user interface and machine control systems. Atlas® can control a complete machine or act as a component in larger systems. Its unique modular and open design allows you to customise, as well as to integrate additional tools to enable a quicker route to market for your product.



Ink Management Systems

GIS ink management systems provide controlled ink supply, pressure regulation and flow management for industrial inkjet systems. Designed to support stable jetting across a wide range of printhead technologies, they can be configured for different flow requirements, ink types and machine architectures. GIS can advise on the appropriate ink delivery configuration to match the selected printhead, application and production environment.





A NANODIMENSION DIVISION

Speak to GIS

+44 (0) 1223 733 733

www.globalinkjetsystems.com

gis.info@nano-di.com

Global Inkjet Systems Ltd
Edinburgh House
St. John's Innovation Park
Cowley Road
Cambridge
CB4 0DS
United Kingdom