

# GIS Print Manager Boards

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The Print Manager Board (PMB-C2, PMB-C8 and PMB-C8-3) is an integral hardware component of the GIS USB platform.

The core electronics technology of this platform is the separation of data handling, managed by the PMB, and print-head control, managed by the Head Interface Board (HIB). It enables a standard Windows PC to drive multiple industrial inkjet printheads via USB in single pass, scanning XY and custom systems.

The PMB provides read and write access to all available inkjet printhead settings including temperature control, voltage and waveform settings, binary and greyscale calibration.

PMB-C2



PMB-C8



PMB-C8-3



## Performance

Each printhead is driven by a dedicated high speed channel capable of delivering print data on demand in the most demanding of applications.

High speed on-board RAM provides ample buffering for single pass and scanning XY systems, allowing the specialised software drivers to deliver continuous static and variable data streams to the printheads.

## Connectivity and Scalability

- Multiple PMB-C2s can be stacked to drive larger arrays of printheads and can easily be replaced with the larger 8-channel variant, the PMB-C8
- Multiple PMB-C8/C8-3s can be stacked horizontally or vertically using an industrial standard VME backplane to drive larger arrays of printheads. Software configurable master-slave architecture simplifies setup and maintenance

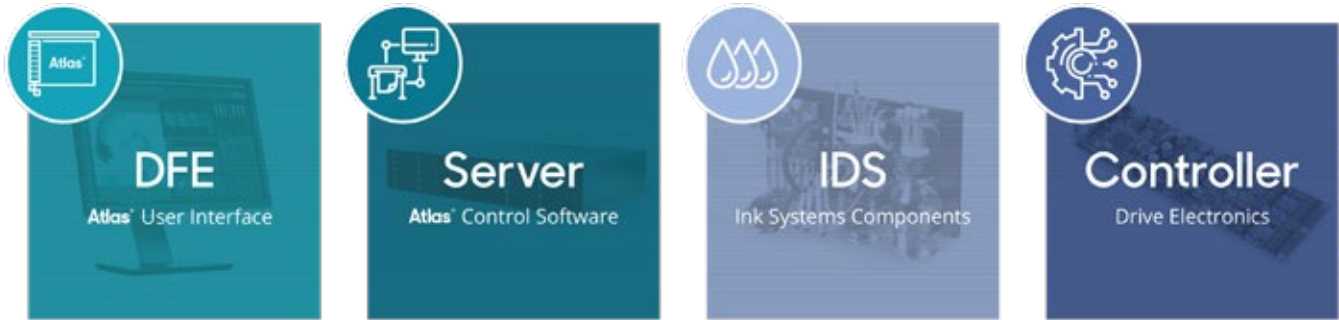
## Drop Placement Control

The Encoder Manager System (EMS) supports industry standard encoders and Product Detect / PrintGo signals and provides per-printhead encoder divide and sub-pixel adjust, delivering complete drop placement control and repeatability.

## Advanced Applications

With the power to simultaneously drive multiple print-head technologies off the same system at different resolutions, the PMB opens up a world of possibilities for printer development and manufacturing.

# Software, Machine Control and Sub-systems for Industrial Inkjet



## Specifications

Feature	PMB-C2	PMB-C8	PMB-C8-3
Dimensions	H20mm W100mm D80mm Weight 85g	H20mm W233mm D160mm Weight 330g	H20mm W233mm D160mm Weight 330g
Power Requirements	12V (0.3 – 1.0A EMS use dependent)	12V (0.3 – 1.0A EMS use dependent)	24V (0.5 – 1.0A EMS use dependent)
PC to PMB Comms (Mb/s)	USB 2.0 (370)	USB 2.0 (370)	USB 3.0 (2600) Fibre optic
Max. Memory (MB)	64	128	1024
Channels	2 x 200Mb	8 x 200Mb	8 x 400Mb
Encoder	RS422 & TTL Quad.	RS422 & TTL Quad.	RS422 & TTL Quad. Isolated, High Speed, Extendible
Print Go	RS422 & TTL, 32 deep	RS422 & TTL, 32 deep	RS422 & TTL, 32 deep
Maximum System Size	No Limit	No Limit	No Limit
PMB – HIB Cable Length	10m	10m	10m
Encoder and Print Go Daisy Chain	Yes RS422	Yes TTL	Yes LVDS

GIS provides a complementary suite of products that companies can easily customise and rebrand - accelerating technology design and cutting development time:

## Software Support

GIS offers a full range of software with its Atlas® platform to drive the PMBs. The Atlas suite of products includes a flexible User Interface (UI) as well as a powerful server technology for managing the entire printing and sub-system process, Atlas Server. Built using Microsoft industry standard software and approaches, Atlas can be configured for different types of users and customised with different languages.

## Ink System Components

GIS also provides a comprehensive range of ink delivery system components suitable for all printhead mode flow requirements.