

Head Personality Boards for Fujifilm Dimatix Printheads

GIS Inkjet Operating System

The HPB-FD-W4D4 from GIS is a Head Personality Board designed to provide communications between the FUJIFILM Dimatix printheads and the GIS Print Manager Boards (PMB-C8/PMB-C2). Combined with amplifier (AMP) and relevant interface (HIB) boards, it is able to drive up to:

- 16 x S-Class SM/SL/SE
- 8 x Galaxy/Nova
- 4 x Q-Class Sapphire/Emerald 256
- 2 x Q-Class Polaris 512
- 2 x StarFire SG1024/M-C

Printhead Control

The HPB-FD-W4D4 will allow grey-scale, multidrop or binary printing at full-speed. It will generate up to four independent waveforms. Customers will be able to shape each waveform with accurate slew-rate and amplitude control in very fine time-slices throughout each pulse, making it ideal for graphics, ink development, and materials deposition applications.

Temperature monitoring is incorporated, as is thermostatic control over heating elements in up to four thermal zones. Q-Class PROMs can be read.

Power Control

Power up and down sequencing is automatically controlled with voltage level auto sensing circuitry.

Form Factor

The HPB-FD-W4D4 and HIB-FD-AMP4 are specifically designed with a small form factor (Eurocard) for easy connection and integration with the FUJIFILM Dimatix printheads.



HPB-FD-W4D4



HIB-FD-AMP4

Features

General

Supported Printheads : S-Class, Galaxy, Nova, Q-Class Sapphire, Emerald, Q-Class Polaris, StarFire SG1024/M-C

Dimensions (HPB-FD-W4D4): H 160mm, W 100mm, D 14mm
Dimensions (HIB-FD-AMP4): H 160mm, W 100mm, D 50mm

Weight (HPB-FD-W4D4) : 95g
Weight (HIB-FD-AMP4) : 420g

Specifically designed for use with GIS software products

High Speed (200MB/s) data channel

Power Requirements

24V DC 0.25-10A (depending on heaters)

160V DC 1.5A

Printhead Control

Heater Control

PROM Access

Independent Waveform Shaping

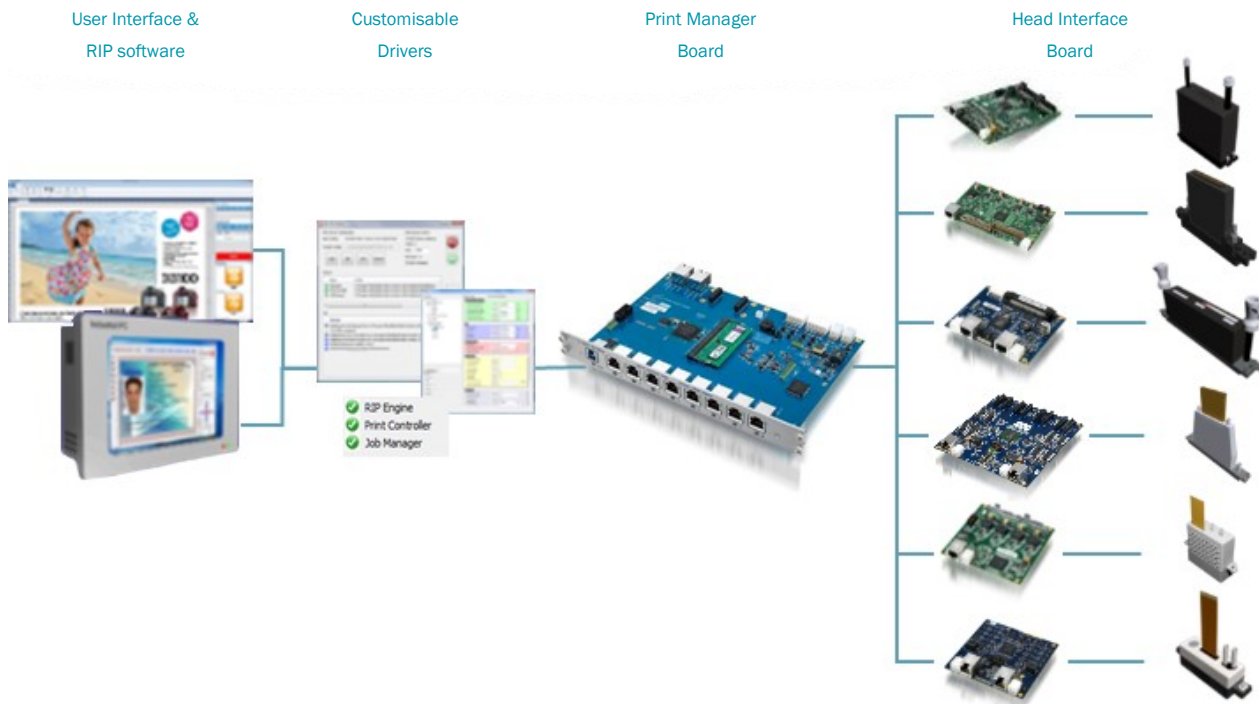
Binary/Greyscale/Multidrop

Cable Length

From PMB : 15m

From HIB to head : 300mm

GIS Operating System



Connectivity

The HPB-FD-W4D4 is a standard interface component of the GIS Inkjet Operating System. It is designed to drive most of the FUJIFILM Dimatix printheads using a GIS Print Manager Board and GIS Software.

Connectors

The HPB-FD-W4D4 assembly requires just three connectors to drive the printheads:

Data Connector:

Standard RJ45 for connection to a GIS Print Manager Board using CAT 6a shielded cabling (up to 15m).

Power Connectors:

Standard 24V DC connector to supply the digital components and heaters with power.

160V DC connector for waveform amplification.

HIB-FD-W4D4



Flexible

Full control over waveform definition from the GIS software interface allows users to get the best performance from their choice of FUJIFILM Dimatix printhead.

Tune waveform amplitudes, timings, rise and fall rates for each of the fire pulse inputs to each of your heads.

The system supports VersaDrop, multiple pulses per grey level and tickle-pulse generation, depending on printhead model.

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