

# Merlin™ DW Controller

General Purpose  
Print Controller



Merlin DW Controller

## Features:

- Supports up to 32 Spectra® 256 Jetting Assemblies
- Up to 4 individual product triggers
- Narrow lane or contiguous image greater than 20 inches
- Console style cabinet
- Ideal for printing, deposition and decorative applications
- Multiple jetting fluids supported
- Support for monochrome, spot and full color
- Operates standalone, distributed network or via line control interface
- Optional touch screen operator interface
- Accepts industry standard file formats
- Complete, self contained

The Dimatix Print Systems™- Merlin DW is a general- purpose, console style, industrial ink jet print controller that supports a wide variety of configured printhead clusters. The controller is capable of driving a total of 32 Spectra® 256 Jetting Assemblies configured in 1 to 4 print head clusters. Each head cluster can be 1 to 4 colors.

In addition to accommodating a variety of printhead cluster options, the versatile design of the Merlin DW can be configured to support many jetting fluid types, making the unit ideal for printing, deposition and decorative food and non-food applications.

The controller enables these printhead clusters to be operated in several print modes including narrow, multi-color lane with support for up to 4 individual product triggers or contiguous images of up to 20-inches wide, and various printhead orientations.

The Merlin DW design allows easy integration and placement with existing manufacturing production line. Fluid and electrical umbilicals connect the controller to the printhead clusters. Umbilical lengths are configured to meet application specific requirements with lengths of up to 35 feet. This affords easy reach to inaccessible or high positions on the production line.

The controller may be operated in a stand-alone, distributed networked mode or operated via standard industrial line control interfaces.

An optional user interface monitor and keyboard allows for the local access and control of functional parameters through a graphical user interface (GUI). The GUI is based on the Microsoft-Windows™ XP operating system. All system features are accessible through easy to use and intuitive menus using touch-screen capability.

The unit is constructed of rugged stainless steel and is designed to NEMA 4X standards. The console style cabinet houses all printhead- tending functions including CPU, drive electronics, pneumatics, and ink delivery systems. It is completely self contained and requires nothing additional beyond standard electrical power.

Standard file formats accepted by the Merlin DW include TIFF, JPEG, EPS, AI and PSP.

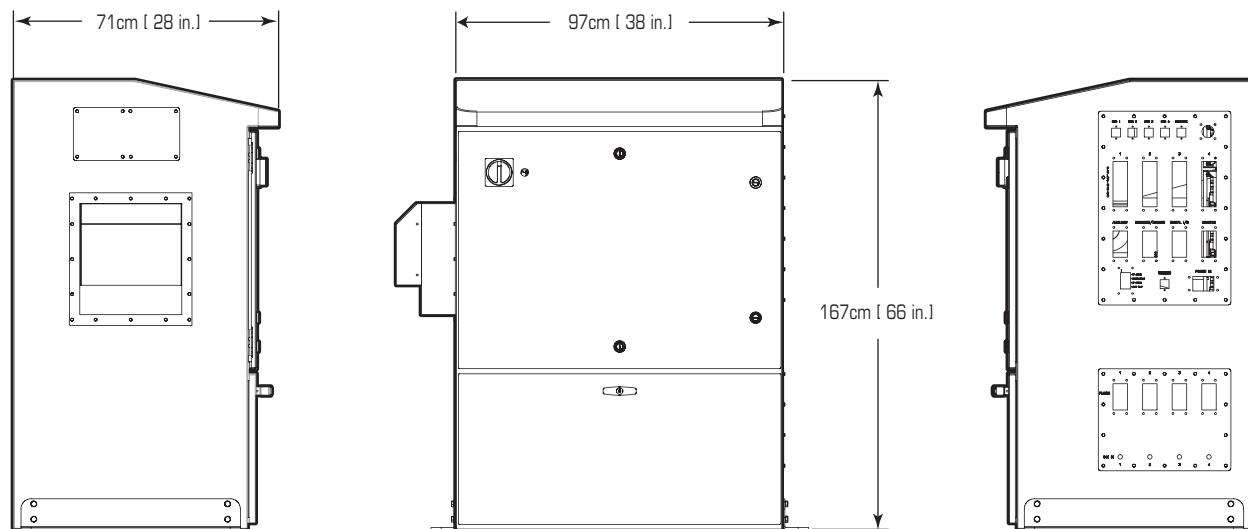
Optional, quick release umbilical cables are offered to interconnect the Merlin DW controller with the desired printhead clusters and are optimized to accommodate specific fluid jetting characteristics and agency regulation requirements.



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Parameter	Merlin DW Controller
Product transport speed	Up to 150 m/min (500 ft/min) or 20kHz jetting frequency
Supply power	Universal input (90/240V 50/60Hz) 20 amps
Number of colors (fluids) supported	Four (process, spot or monochrome)
Head clusters supported	Up to four. Total of 32 jetting assemblies
Graphic user interface	Touchscreen with keyboard and mouse
Product trigger sensor inputs	Four [12V NPN]
Product transport encoder inputs	One [12 V differential quadrature]
Input image file format	Most graphic files [TIFF, JPEG, EPS, AI, PSP, BMP etc]
Printed image file format	TIFF
Control system	Windows™ XP OS
Humidity	10-80% non-condensing
Ambient temperature	15-27° C [60-80° F]
Ink Type(s)	Liquid [UV, solvent UV, solvent, aqueous, oil, food grade glycol]
Enclosure Construction	Stainless steel NEMA 4X design
Electrical and fluid connections	Quick disconnect
Altitude	< 3000 ft above sea level

## Physical Dimensions



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.



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