

Complete Motion Control on a PC



Machine Controller

MP3100

Models : JAPMC-MC3100-1-E (16 axes)
JAPMC-MC3100-2-E (32 axes)

Better Performance Super-High-Speed Application Processing

1 Greater CPU Performance

The processing speed is four times faster than the MP2100. The high-speed scan time can be set to as low as 125 μ s.

2 MECHATROLINK-III

A 125- μ s communications cycle enables detailed commands to be sent at high speeds and improves processing precision and tracking accuracy.

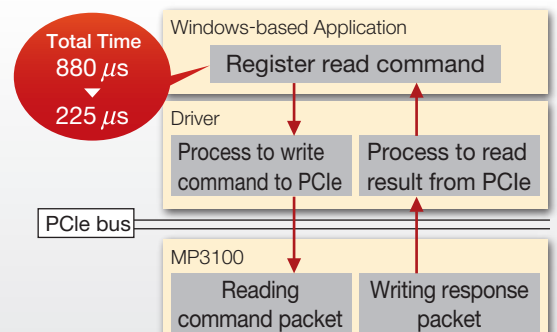
3 High-speed I/O (5 inputs and 4 outputs)

A High-speed I/O Module is built in to provide I/O service with a high-speed scan of 125 μ s.

4 PCI Express

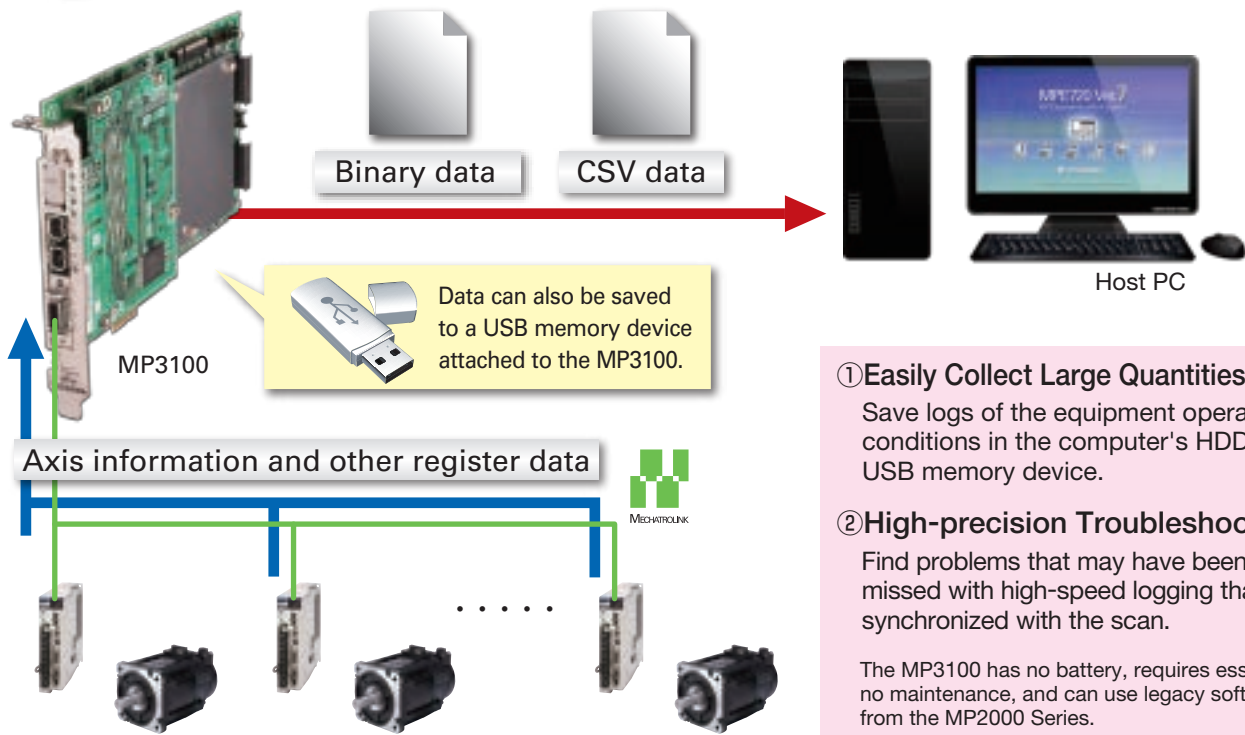
Faster data communications between the Machine Controller and PC reduces takt time.

For example, 500 words of register data can be read with only about a third of the register access time (in comparison to the MP2100).



Easier
to
Use

Improved Traceability for Large-Scale Systems



① Easily Collect Large Quantities of Data

Save logs of the equipment operation conditions in the computer's HDD or USB memory device.

② High-precision Troubleshooting

Find problems that may have been missed with high-speed logging that is synchronized with the scan.

The MP3100 has no battery, requires essentially no maintenance, and can use legacy software from the MP2000 Series.

■ Comparison to the MP2100

The MP3100 provides high-speed processing performance, greater precision, increased program capacity, and more application drawings.

Items		MP3100		Existing Products	
		16 axes	32 axes	MP2100	MP2100M
Performance	Rate of Improved Operation	4.0		1.0	
	Minimum Scan Time	125 μ s		1.0 ms	
Memory Capacity	DRAM	256 MB (DDR3)		16 MB (SDRAM)	
	M Registers	1024 K words (battery backup)		64 K words	
	G Registers	2048 K words (no battery backup)		—	
	Program Capacity	15 MB	31 MB	5.5 MB	
Number of Drawings	High-speed Drawing	1000		200	
	Low-speed Drawing	2000		500	
	User Function Drawing	2000		500	
MECHATROLINK I/F		One circuit for MECHATROLINK-III (2 ports) Minimum communication cycle: 125 μ s		One circuit for MECHATROLINK-I/II (1 port) Minimum communication cycle: 1 ms	Two circuits for MECHATROLINK-I/II (2 ports) Minimum communication cycle: 500 μ s
USB I/F		One USB 2.0 port (for storage device)		—	
Board Size		111.15 (W) \times 167.65 (D) mm (PCIe half size)		106.68 (W) \times 174.63 (D) mm (PCI half size)	
Approx. Mass		250 g		140 g	210 g

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● Product Information Site

<http://www.e-mechatronics.com/en/>

In the event that the end user of this product is to be the military and said product is to be employed in any weapons systems or the manufacture thereof, the export will fall under the relevant regulations as stipulated in the Foreign Exchange and Foreign Trade Regulations. Therefore, be sure to follow all procedures and submit all relevant documentation according to any and all rules, regulations and laws that may apply. Specifications are subject to change without notice for ongoing product modifications and improvements.

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