

Industrial PC Platform NY- series

# IPC Programmable Multi Axis Controller

NY51□-A

## Create the best and unique system



### High-speed multi-axis control

- Up to 128 axes of control
- Motion control period: 250 μs/16 axes<sup>\*1</sup>



### Flexibility

- Flexible function development capability (G-Code/ANSI C/original programming language)
- EtherCAT for flexible system configuration



### Reliability

- Multi-tasking of Motion Control and Windows/Linux applications
- Hypervisor<sup>\*2</sup> allows to continue to control even if OS crashes

## Omron helps manufacturers boost productivity and manufacturing quality



In order to achieve this, Omron and Delta Tau Data Systems, Inc. are working together as one Omron Group to improve sophisticated Motion Control and Programmable Logic Control systems. These are the systems that are required for the next generation's automation systems around the world. By combining global leading Delta Tau Data Systems' Motion Control technologies, Omron I/O+S (Input, Logic, Output, and Safety) Control technologies can open up new applications and solutions.

NY-series IPC Programmable Multi Axis Controller comes equipped with a Windows operating system and the world's highest level<sup>\*3</sup> motion controller "Programmable Multi Axis Controller" developed for precise multi-axis control by Delta Tau Data Systems. This provides flexibility in the creation of high-resolution graphics and applications and the development of motion control for high-end applications. The system can perform machine control tasks while running applications.

<sup>\*1</sup>. Reference value.

<sup>\*2</sup>. Software avoids mutual interference by appropriately assigning IPC hardware resources (boards, CPU cores, etc.) to OS. Machine control task is not interrupted even if a Windows crashes.

<sup>\*3</sup>. "The world's highest level" refers to the motion control performance of 16.6 microseconds/1 axes or 50 microseconds/8 axes (Omron survey as of July 2016).

## High-speed and high-precision motion controller and PC in one

The NY51□-A can be integrated into your existing system. Consult with your Omron representative even if your system is composed of other manufacturers' products.

Industrial Monitor  
**NYM**

Coming soon



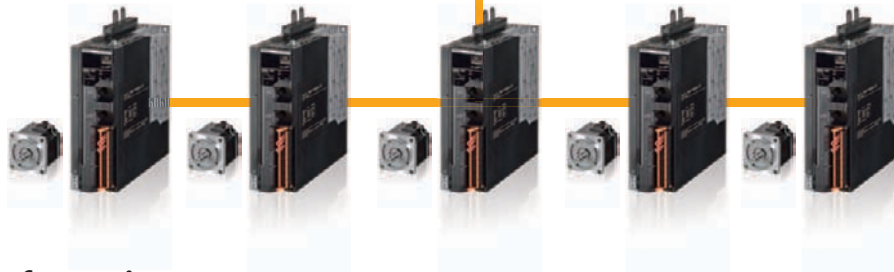
NY-series IPC Programmable  
Multi-Axis Controller  
**NY51□-A**



IDE  
(Integrated Development Environment)  
Develop, debug, and test programs  
developed in language for  
original programming language  
or in C language.



1S Series AC Servomotor/Servo Drives Servomotor  
**R88M-1□□-ECT**  
Servo Drives with built-in EtherCAT Communications  
**R88D-1SN□-ECT**



**EtherCAT**

## Ordering Information

### NY-series Programmable Multi-Axis Controller

Processor type	Specifications					Model
	Windows	Memory	Storage size	Interface	Fan	
Intel® Core™ i7-4700EQ 4th generation CPU with Fan module for active cooling	Windows Embedded Standard 7 32 bit	8 GB	64 GB(SSD)	RS-232C	Yes	<b>NY512-A600-1XX11391X</b>
	Windows Embedded Standard 7 64 bit	8 GB	64 GB(SSD)	RS-232C	Yes	<b>NY512-A600-1XX21391X</b>

## Programmable Multi Axis Controller

The Programmable Multi Axis Controller has been developed by US-based Delta Tau Data Systems, Inc. to deliver the world's highest level\* of multi-axis control performance.

Providing the high-speed processing capability to perform precise linear motor drive control and nanometer positioning that require ultra fast responses, the Programmable Multi-Axis Controller is appreciated by manufacturers of semiconductor manufacturing equipment and other products employing leading-edge technologies.

Through working together with Delta Tau Data Systems which joined the Omron Group on September 1 2015, Omron will further advance automation technologies in an ever-changing manufacturing environment to help manufacturers improve productivity and manufacturing quality.

\* "The world's highest level" refers to the motion control performance of 16.6 microseconds/1 axes or 50 microseconds/8 axes (Omron survey as of July 2016).

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