

Product Description

RMC100 Series

2 to 8-Axis
Motion Controller



The RMC100 Series is Delta's most versatile motion control product line. The RMC100 is a modular, high-performance motion controller appropriate for a wide range of industrial applications for position and velocity control. The RMC101 provides all the options and benefits of the RMC100, plus pressure and force control.

The RMC100 also offers communications options ranging from fieldbuses such as Ethernet, 12Mbaud PROFIBUS DP, and Modbus Plus to discrete I/O (plus the optional four line keypad/display). This makes these

compact, DIN rail-mounted controllers an excellent choice for large and small systems.

You choose the motion control CPU, fieldbus communications module, and one or more transducer interface modules that best suit your system needs.

The RMC's modular construction allows you to mix and match from two to eight axes of any combination of transducers. Delta will factory configure your complete RMC100 motion control module.

RMC70 Series

1 or 2-Axis
Motion Controller



The RMC70 product complements Delta's flagship RMC100 family and expands Delta markets by offering even more value for one and two axis applications on linear or rotary axis.

The RMC70 is a modular controller. The Base module - consisting of the CPU and the Axis module - is factory-configured. Each factory-installed Axis module is available with one or two control axis interfaces. Up to 4 expansion modules may be added to the RMC70, including digital I/O, analog reference and pressure or force inputs.

The RMC70 provides an extensive set of motion commands and programming capability for quick and easy yet flexible motion control for virtually every motion application. It also supports numerous control modes, including closed loop motion with full PID loop control and open loop motion.

Tuning Wizard



The "Tuning Wizard", a new RMC100 multi-axis motion controller feature that speeds up and simplifies the process of computing optimal gains for closed-loop motion control.

The Tuning Wizard helps select appropriate gains for a position axis—answering the often asked question, "Where do I begin?" This easy-to-use RMCWin software tool guides the user through a step-by-step process to import axis data. The Tuning Wizard then uses this information to build a set of mathematical system models and determines which model best fits the real system. The Tuning Wizard next prompts the user to set

the desired system response between "conservative and aggressive" using a single slider bar and computes the optimum PID and feed forward gains.

The user can quickly and easily determine optimal machine performance by comparing the axis motion resulting from various slider bar settings visually with RMCWin software graphics tools. Typical results, using the Tuning Wizard, are better tuning in a fraction of the time as compared to traditional "trial and error" methods, even for users with a high level of motion expertise.

VC2124

Voltage to
Current Converter



The VC2124 voltage-to-current converter transforms $\pm 10V$ signals into current signals capable of driving hydraulic servo valves or similar loads. It also provides a convenient way to set the full scale current to match valve requirements, limit maximum current, or set optimum working ranges.

These bipolar outputs are switch selectable in 10 mA increments up to ± 100 milliamps (mA) on each of two channels. The VC2124 requires a single 24 V power supply, eliminating the dual 15 V supplies needed by other converters.

In addition to being able to drive two valves separately, the VC2124's two channels can be combined in a parallel configuration to drive larger servo valves that require more than 100 mA but less than or equal to 200 mA.

To aid in diagnostics and troubleshooting, the converter module provides two LED indicators for each channel (one indicating input voltage amplitude and polarity and one indicating output saturation, which may represent an output fault such as a loose wire).