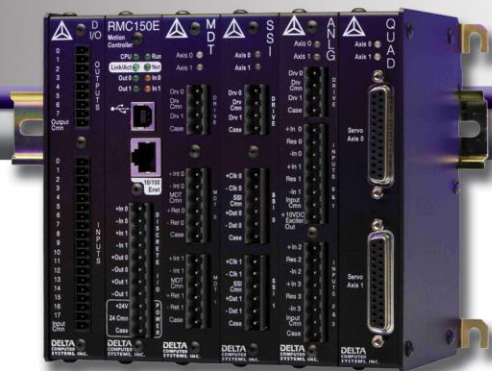


# Comparing RMC150/151 and RMC100/101



RMC150/151 enhancements include the powerful RMCTools software, and a 32-bit floating point interface versus the 16-bit integer interface of RMC100/101. Upgrading from the RMC100/101 to the RMC150/151 will require reprogramming of the RMC and application software on any PLCs, HMIs or PCs used with the RMC. As such, the RMC150E CPU is a *design-in upgrade*, requiring more than a simple *drop-in replacement* for existing RMC100 CPUs.

When retrofitting existing RMC100/101 installations with an RMC150/151, this document provides important information, such as compatible modules and module versions, features, etc.

## General Modules Support Differences

### More DI/O

In Ethernet applications, the built-in RMC150E CPU Ethernet port frees the left-most slot for a DI/O module. The RMC150/151 also increases support for discrete I/O modules from 2 to 4.

### More Analog Inputs

Not all of the analog inputs could be used on some RMC100/101 configurations; all can be used on the RMC150/151.

### Supported Modules

The RMC150/151 does not support all of the modules supported by the RMC100/101. See the **Supported Modules** section for a list. The RMC150/151 requires newer versions of some modules.

### Performance and Features

Although the axis modules are the same, the RMC150/151 firmware and RMCTools software enable higher performance and more flexibility in some cases, particularly with quadrature modules.

### Position-Pressure and Position-Force

The RMC151 supports up to 8 position-pressure or position-force axes if the position and pressure inputs are all analog. The RMC151 supports up to 4 position-pressure or position-force axes if the position inputs are not analog.

## Product Support

Delta will continue to support the RMC100/101.

All RMC motion controllers are backed by a company legacy of more than 25 years of excellent product support. Responsive 24/7 customer service is just a telephone call away.

## Programming

The RMC100/101 Step Programs must be rewritten into the more flexible RMC150/151 User Programs.

## Communications

The RMC150/151 supports only Ethernet communications. PROFIBUS and possibly serial RS-232/485 are planned for the future.

# RMC150/151 DATASHEET



## Modules Support Differences

✓ = Supported, ✗ = Not Supported.

sModule	RMC100/101	RMC150/151
<b>Axis Modules</b>		
MDT(M)	✓	✓
SSI(S)	✓	✓
Analog (H)	✓	✓ Requires module version 7
Analog (G)	✓	✓ Requires module version 7
Analog(A)	✓	✓
Quadrature(Q)	✓	✓ Requires module version 7. Supports registration and more homing options, including highly accurate z-pulse homing.
Stepper(QST)	✓	✗ May be supported in the future.
Resolver(R)	✓	✓
<b>Discrete I/O</b>		
DI/O	✓	✓ Supports up to 4 DI/O modules.
<b>Communication Modules</b>		
ENET	✓	✗ The RMC150E CPU has built-in 10/100 Mbps Ethernet.
PROFI	✓	✓
SERIAL	✓	✗ Will not be supported.
MB+	✓	✗ Will not be supported.

## Control Features Differences

Feature	RMC100/101	RMC150/151
Data Registers	16-Bit Integer	32-Bit Floating Point and Integers
Maximum Control Axes	8	8
Maximum Total Axes	8	16
Maximum Position-Pressure (Dual-Loop) Axes	4	8, if the position feedback is analog
Splines	Supported	Supported
Sinusoidal Move	Supported	Supported
Tuning Wizard	Supported	Supported
Autotuning	Not Supported	Supported