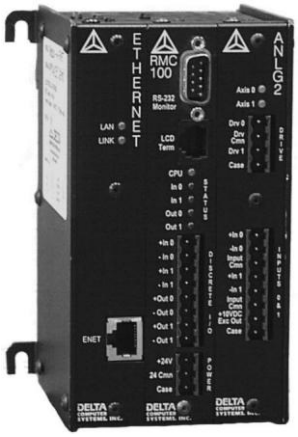

RMC Two-Input Analog

16-bit Analog Interface for RMC100 Motion Controllers

This two-input analog interface module provides cost-effective analog position and pressure control. Its 16-bit inputs can also be used for position/pressure control. This module includes a drive output for each input used for controlling position, pressure, and force.

Delta also offers four-input analog modules, which are a better fit for many pressure/force applications. Refer to the RMC Four-Input Analog data sheet for details.

Refer to other RMC data sheets or the RMCWin online help for more information. Download RMCWin from Delta's web page at **www.deltamotion.com**.

Analog Module Features

- Two isolated 16-bit inputs
- 16 times oversampling
- ±10V input range
- +10V exciter output
- Two isolated, ±10V, 12-bit drive outputs per module
- Current output up to ±200mA with VC2100 converter option

Analog Module Applications

- Closed loop positioning with analog transducers
- Closed loop pressure or force control
- Position/pressure control with analog position and pressure transducers
- High-resolution pressure inputs for position/pressure control with any of the RMC's position transducer interfaces
- High-resolution differential force input for position/force control using any of the RMC's position transducer interfaces

System Applications

- Presses
- Injection/RIM/blow molding
- Edgers/headrigs/veneer lathes
- Pinch rollers/winders/wrappers
- Casting/forging
- Pneumatic press rolls
- Tube bending/forming
- Cyclic testing
- Mechanical Animation

Pressure/Force Control Option

For applications where pressure or force must be controlled, the RMC can be purchased with the Pressure/Force Control option.

With this option, an axis can maintain a specified force or follow a force profile.

This option also provides the capability of transitioning smoothly between position and pressure while in motion. In many applications, position/pressure control with just one valve simplifies hydraulics and improves performance.

Ordering Information

To indicate a two-input, 16-bit analog module, insert **-G*n*** into the part number, where *n* is the number of modules (4 max).

To include the Pressure/Force Control option, use **RMC101** instead of **RMC100**.

For example:

- **RMC100-G2-DI/O:** 4 channels of analog position control
- **RMC101-M1-G1-MB+:** 2 channels of MDT input with 2 channels of analog input with pressure control.

DELTA COMPUTER SYSTEMS, INC.

RMC Two-Input Analog

Specifications

Analog Input Interface	Inputs	Two 16-bit differential
	Isolation	750VDC
	Overvoltage protection	40 Volts
	Input Range	±10V
	Input impedance	1MΩ
	Input filter slew rate	25V/ms
	Oversampling	16 times per control loop
	Offset drift with temperature	0.2 LSB/°C typical
	Gain drift with temperature	20 ppm/°C typical
	Non-linearity	25 LSB (counts) typical
	Exciter Output	10VDC ± 2%, 8mA
Drive Interface	Outputs	Two ±10V, 5mA maximum, 12-bit DAC
	Isolation	750VDC
	Current Output Accessory	VC2100 voltage-to-current converter output range is adjustable from ±10mA to ±200mA in 10mA steps
Environment	Operating temperature	+32 to +140 °F (0 to +60 °C)
	Storage temperature	-40 to +185 °F (-40 to +85 °C)
	Agency compliance	CE, UL, CUL (pending)
Power Requirements	All RMC modules are powered from the RMC controller.	The user must supply power to the transducers unless the 10V exciter output is used.

Analog Wiring

Inputs 0 and 1:

Pin	Function
+In 0	Differential analog input 0 +
–In 0	Differential analog input 0 –
Input Cmn	Analog common (Isolated)
+In 1	Differential analog input 1 +
–In 1	Differential analog input 1 –
Input Cmn	Analog common (Isolated)
+10VDC Exciter Out	+10VDC @ 8mA exciter output
Case	Controller chassis ground (shield)

Drive Outputs 0 and 1:

Pin	Function
Drv 0	Axis 0 Drive
Drv Cmn	Drive common (Isolated)
Drv 1	Axis 1 Drive
Case	Controller chassis ground (shield)

Company Profile

Delta Computer Systems, Inc. manufactures motion controllers, color sensors/sorters, and other industrial controls providing high-performance automation solutions to a wide range of industries.

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Delta Computer Systems, Inc. 1818 SE 17th St., Battle Ground, WA 98604-8579
360-254-8688 Fax 360-254-5435 sales@deltamotion.com http://www.deltamotion.com