

RM-2000 Rack Mount Stage Controller



Features

- 2U 19" Rack Mount Control Unit: 22.8D x 48.3W x 8.1H cm (9" x 19" x 3.2")
- 100 MHz Microcontroller for Faster Command Processing and Servo Control
- Closed-Loop DC Servo Control of up to Four Motorized Axes
- 0-10 Vdc DAC Output for Additional Analog Control
- Firmware Upgradable via Serial Connection
- Remembers Last Position on Power Up
- LCD Display Shows Axes Coordinates and Status
- USB or RS-232 Serial Control with Rates to 115200 Baud
- "Zero", "@", and "Home" Buttons on Joystick
- Left- or Right-Hand Joystick Unit

Options Supported

- Z-Drives, with Clutch Switch
- Dual Filterwheel Control
- Dual Shutter Control
- Piezo Z-axis Control
- Linear Encoders (XYZ)
- Hardware Video Autofocus
- Raster and Serpentine Scanning Routines with TTL Synchronization
- Leica Smart Move™ Digital Potentiometers for XY Motion Control
- TTL Control of Moves to Previously Stored Locations
- Multi-output Hardware Sequencer Functions
- Bare boards & Custom firmware are available for OEM applications

Specifications

Digital Servo Loop Time	1 millisecond per Axis
Digital-Closed-Loop Speed Dynamic Range	> 40 dB
Motor Type	Brushed DC Servo Motors
Maximum Motor Current	1.5 Amp
Motor Voltage	6 – 24 Vdc
Encoder Options	Internal Rotary or External Linear Encoders Supported
Number of Axes	Up to four Motor Axes, plus DAC Output Channel
Manual Controls	XY Joystick, Control Wheel, Zero, @, and Home Buttons, Filterwheel Advance to Next, Shutter Toggle, Controller Reset
Display	4-line by 40-character LCD Display shows Axes Positions and Status
Computer Interface	RS-232 Serial and USB
Interface Baud Rate	9600, 19200, 115200
Filterwheel Switching Time	< 40 ms
Shutter Switching Time	≤ 8 ms
Power Requirements	Voltage 100 – 240 Vac 50/60 Hz Current 2.3 Amp (max)