

## MS-2000-WK Multi-Axis Stage Controller



### Features

- 100 MHz Microcontroller for faster command processing and servo control
- Closed-loop DC servo control of up to four motorized axes
- Firmware upgradable via serial connection
- 0-10V DAC for single piezo axis control
- Remembers last position on power down/up
- LCD display shows axes coordinates and status
- “Zero” and “Home” buttons for simple stand-alone operations
- USB or RS232 serial control with baud rates to 115200 Baud
- Compact ergonomic tabletop control unit 6”D x 9”W x 3”H (16½ x 23 x 9 cm)

### Options Supported

- Linear Encoders
- Piezo Z-axis Control
- Hardware Video Autofocus
- Z-axis Drives with Electromechanical Clutch
- 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
- Bare boards & Custom firmware are available for OEM applications

### Specifications

|   |  |
|---|--|
| <b>Digital Servo Loop Time</b>                            | 250 $\mu$ s $\times$ number of axes                                |
| <b>Digital-Closed-Loop Speed Dynamic Range</b>            | > 40 dB  |
| <b>Motor Type</b>   | Brushed DC Servo Motors  |
| <b>Maximum Motor Current</b>                              | 1.5 Amp  |
| <b>Motor Voltage</b>                                      | 6-24 V   |
| <b>Encoder Options</b>                                    | Internal Rotary or External Linear Encoders are supported          |
| <b>Number of Axes</b>                                     | Up to four Motor Axes, plus DAC Channel for Piezo Drive            |
| <b>Manual Controls</b>                                    | XY Joystick, Control Wheel   |
| <b>Display</b>  | 4-line by 40-character LCD Display shows Axis Positions and Status |
| <b>Computer Interface</b>                                 | RS232 Serial and USB   |
| <b>Interface Baud Rate</b>                                | 9600, 19200, 115200  |
| <b>Electrical Requirements from External Power Supply</b> | 24V DC<br>1.5 Amp  |