

introduction

The *S200* is a two axis, stand-alone, intergrated servo controller / driver controlling position, velocity and torque of DC brush type motors and actuators

The *S200* implements a mnemonic type command instruction set via a standard RS-232 serial communications interface. These commands can be executed directly or used to create command macros which are stored in the on-board NVRAM.

The *S200* interfaces to the real world via 2 PWM switching amplifiers, 2 channels of quadrature type encoder interface and 4 channels each of optoisolated digital inputs and outputs.



Model *S200* Two Axis Servo Motor Controller/Amplifier

features

- **Description** Stand-Alone, 2 Axis, Brush Type, Servo Motor Controller/Amplifier
- **Operating Modes** Position, Velocity, Torque and Electronic Gearing
- **Filter Algorithm** PID
- **Maximum Servo Loop Rate** 100 Microseconds per Enabled Axis
- **Trajectory Generator** Trapezoidal, Electronic Gearing
- **Servo Position Feedback** +5 V Quadrature Type Incremental Encoder with Index
- **Max. Encoder Count Rate** 2 Million Quadrature Counts per Second
- **Encoder and Index Inputs** Single-Ended or Differential
- **Output** Power PWM, 3 Amps cont. and 6 Amps Peak at 48 VDC.
- **PWM Frequency** Approximately 19.531 kHz
- **Position Range** \pm 2,147,483, 648 Quadrature Counts
- **Velocity Range**..... 0 to 1,073,741,824 Resolution of 1 part in 65,536
- **Acceleration Range** 0 to 1,073,741,824 Resolution of 1 part in 65,536
- **General Purpose Digital I/O** 4 Optoisolated Inputs, 4 Optoisolated Outputs
- **Expansion I/O** Optional Expansion to 60 I/Os
- **Dedicated Digital Inputs** Limit +, Limit -, Home and Fault per axis, all Optoisolated
- **Communication Interface** RS-232 Serial Interface, Adjustable Baud Rate, 8 data Bits, 1 Stop Bit, No Parity, XON/XOFF Handshake
- **Supply Voltage** +18 to +50 VDC
- **Motor Voltage** +12 to +48 VDC
- **Analog Inputs** 5 Channels with 10-bit Resolution, 3 are User Accessible, 0 to 10V
- **Analog Ouputs** 2 Channels, 12 Bits, \pm 10 Volts at 5 mA
- **Weight** Approximately 16 oz.
- **Dimensions** 8.0" L. x 1.2" W. x 3.3" H. (not including mounting tabs)
- **Enclosure** Rugged Powder Coated Aluminum Extrusion

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