



equipment solutions SCA-814 Server Controlled Amplifier

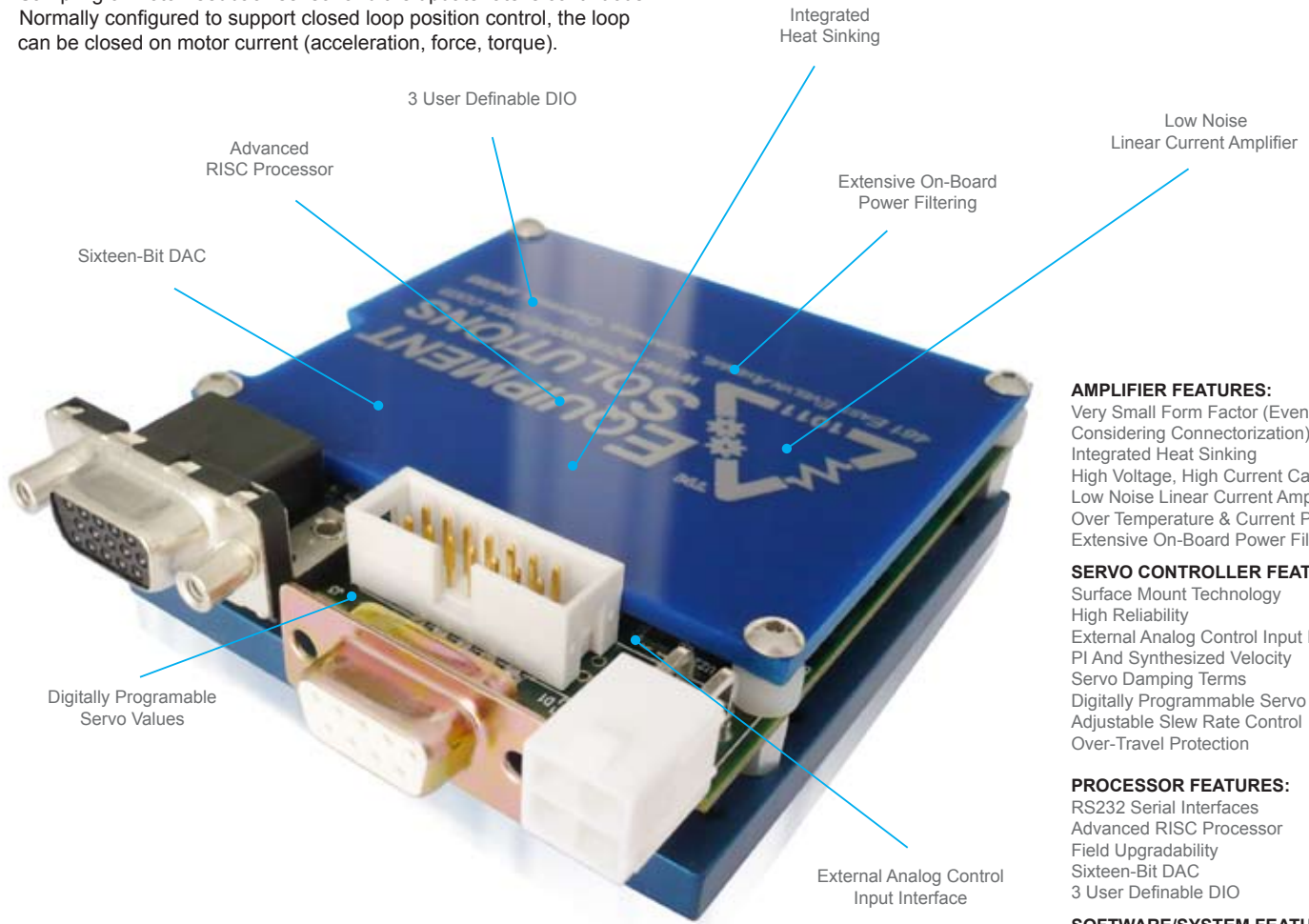
Linear Current Amplifier: The SCA-814's voltage to current amplifier, bipolar power supply can extend from ± 12 to ± 35 volts. Various safety protections include an external enable bit, temperature shutdown, current limits, and fused amplifier output. Its integrated heat sinking provide various mounting options. Ordered with various current handling capabilities, we can provide the most cost-effective solution for your application. The motor connector provide interfaces for limit switches or digital encoders, analog motor temperature sensing line, and support for *Plug-N-Go*. Our digital processor enables a remote host to control the motor with RS232 channel or optional USB interface. The processor card's many built-in resources include DIO, DAC, ADC and FLASH memory (16-bit DAC is used to command the servo). 3 bits of user-definable digital inputs, outputs, and *Plug-N-Go* support allow compliant motors to be near instantly tuned.

Analog Servo Controller: Accepting differential analog user-command and motor feedback signals, it applies a PI and synthesized velocity feedback damping (V) control law—adjustable by digital potentiometers. Other digital controls provide sensor offset and gain, motor limits and slew rate regulation. On-board circuitry supports over-current and over-travel shutdown, servo enable, fault reset and a fault sense bit. Sampling of motor feedback sensor and the update rate is continuous. Normally configured to support closed loop position control, the loop can be closed on motor current (acceleration, force, torque).

Servo Tuning & Analysis Software: This kit provides programmable access to features of the SCA814 Servo Controller System. Menu driven software guides you, step-by-step through system set-up, tuning and evaluation, with sample applications and ActiveX libraries included.

SCA-814 Specifications:

Range of Motion:	10 mm
Servo Bandwidth:	10 kHz
User Definable I/O:	2 + (3 Interrupts)
Interfaces:	RS232
Operating Temp	0°C to 50°C
Power:	$\pm 12V$ to $\pm 35V$ DC
Motor Drive:	$\pm 12V$ to $\pm 35V$ DC 10 Amps peak
Size:	3.0 x 3.0 x 0.5 in.



AMPLIFIER FEATURES:

- Very Small Form Factor (Even When Considering Connectorization)
- Integrated Heat Sinking
- High Voltage, High Current Capabilities
- Low Noise Linear Current Amplifier
- Over Temperature & Current Protection
- Extensive On-Board Power Filtering

SERVO CONTROLLER FEATURES

- Surface Mount Technology
- High Reliability
- External Analog Control Input Interface
- PI And Synthesized Velocity Servo Damping Terms
- Digitally Programmable Servo Values
- Adjustable Slew Rate Control
- Over-Travel Protection

PROCESSOR FEATURES:

- RS232 Serial Interfaces
- Advanced RISC Processor
- Field Upgradability
- Sixteen-Bit DAC
- 3 User Definable DIO

SOFTWARE/SYSTEM FEATURES:

- Windows 98, 2000 XP Support
- Patent Pending Technologies
- Software Developers Kit Available

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