

Model SPS-2711 Servo Digital Controller for Precision Positioners

The Servo Digital Control Unit (SDC) is a microprocessor-based, servo controller, providing both position and rate-loop control of the positioner. A firmware download that modifies digital compensation filters allows the position and rate servo-loops to be optimized for different payloads.

The SDC includes multiple RS-422/RS-232/RS-485 and Ethernet ports to allow control of, and access to, the signals generated by sensors and monitoring equipment associated with the payload. Cobham's brushless, low-torque-ripple motors and the Pulse-Width-Modulated (PWM) amplifiers within the SDC provide rapid and precise control of the pedestal.

The SDC monitors servo faults and provides a number of safety features, which include the ability to prevent remote operation of the positioner while maintenance personnel are working on the unit.

The SDC is available for mounting in either a 19-inch EIA rack, a NEMA weatherproof enclosure or it can be custom packaged. The SDC may be commanded by an external computer system, joystick, or autotracker.



FEATURES:

- Operation from 120 or 220 VAC, 1 ϕ or 3 ϕ and 28 VDC
- Brushless 3 ϕ , sinusoidally driven servo amps, available in a variety of power levels
- RT Linux operating system
- Tailored to a software interface specification
- Uses high reliability components including VICOR power supplies
- Provided with a variety of accessories - joystick, auto video trackers, VGA monitors, recording media, time code generators, video annotation and stabilization components (gyros)
- Includes EMI/EMC suppression
- Programmable modes of operation including BIT, payload control, calibration and set up
- interfaces with a wide variety of feedback pick-offs; resolver inductosyn, gyro's, optical encoders and resolvers
- MIL capable custom Servo Control Board (MDC) for compact MIL requirements