ACR7000 Series

Multi-Axis Motion Controllers



ACR7000 Series

The latest addition to the ACR7000 family is a traditional multi-axis motion controller, equally well-suited for new machine designs or as a migration path for the ACR9000. A new Arm® processor powers multitasking, Ethernet and sophisticated motion control in a streamlined package.

Available in 4 and 8 axis configurations, the ACR7000 Controller utilizes the AcroBasic programming language which contains an expansive, proven set of motion and I/O commands for maximum application flexibility. Dual Ethernet ports offers access for PC, PLC and HMI communications. With Ethernet/IP™. the ACR7000 can join a PLC network or access remote I/O modules. Parker Motion Manager software, with all the tools needed to create and optimize applications, unlocks the value of the ACR7000 and puts the machine is motion.

Contact Information:

Parker Hannifin Corporation

Electromechanical & Drives Division

5500 Business Park Drive

Rohnert Park, CA 94928

phone: 800.358.9070 / 707.584.7558 email: emn_support@parker.com www.parkermotion.com

Specifications

opoomoatione	
Axes/controller	4 or 8
Processor	800MHz Arm® Cortex®-A8
Trajectory calculation	64-bit precision, every 250-500 μs
User memory	MB Flash-based. Retains user programs and system configuration parameters.
Multi-tasking	8 coordinate systems/16 text programs/5 communication channels
Interpolation	Linear, circular, sinusoidal, helical, elliptical, spline, 3D arcs
Servo loop	PID, velocity and acceleration feed forward Notch and LoPass filtering
Input Voltage	24VDC, 30-50W
Command Outputs	Step/Direction @ 2.5 MHz maximum +/-10V analog output @ 16-bit resolution
Digital Inputs	24VDC optically isolated onboard inputs 20 inputs for 4 axes, 40 inputs for 8 axes
Digital Outputs	24VDC optically isolated onboard outputs 4 outputs for 4 axes, 8 outputs for 8 axes
Analog Inputs	8 single-ended (4 differential) inputs @ 16-bit resolution (optional)
Encoder Inputs	20 MHz post-quadrature maximum Software configurable for SSI, quadrature, step and direction, CW/CCW modes 1 per axis + 1 Auxiliary
Motion Enable	Dedicated input disables drives and command outputs
Communications	100 Base-T, 2x RJ-45 connector, Supports TCP/UDP and EtherNet/IP
Development Software	Parker Motion Manager 2.1 and higher
API	Libraries for C++,C#, VB.net, etc
Programming Language	AcroBASIC
Standards	CE (EMC), RoHS

