Automatic Door Access Controller Low Cost High Voltage Motion Control



Automatic door access control from OTEC opens the way for complex building access systems.



OTEC redesigned our entire motion control platform. Low cost, high performance, with complex motion profiles and whisper quiet operation are the hallmarks by which our controllers are judged. OTEC really came through.

- VP Access Control Engineering

Automatic Door Access Controller

Automatic door access control provides the precision movements needed to control heavy glass doors safely. Weighing as much as 600 pounds each, door panels must open rapidly and close safely under a variety of environmental conditions. This low cost dual automatic door access controller operates directly off line voltage. Line voltage operation provides the power needed to achieve the complex acceleration and deceleration profiles required by today's modern door systems. Precision, real-time position sensing coupled with 32bit ARM-based processing allows the algorithmic control of motion profiles with split-second accuracy.

High Voltage H-Bridge Motor Controls

Operating at line voltage, dual FET-based H-bridge motor controls provide the switching needs for high power acceleration and braking. Today's high voltage FETs boast rapid switching times with miraculously low on-time resistance. Multiple surface mounted FET devices transfer their operating heat directly into the circuit board for efficient cooling in the most demanding operating conditions.

Safety Achieved by Design

Consumer applications must meet a number of operational and electrical safety requirements. Motion controls must be safe in the presence of people. Precise speed and torque limiting is an essential operational ingredient. High voltage circuit design techniques ensure creepage and clearance spacing are sufficient for long term operation.

Low Radiated Emissions (EMI) by Design

Precise control of FET turn-on and turn-off times together with careful electrical routing, properly selected filtering components and good design practice make this dual motion control electrically quiet. OTEC carefully modeled power dissipation and EMI generation attributes to achieve the lowest EMI possible in a compact device.

Orchid Technologies: Precision Motion Control

The development of custom electronic products for our OEM clients is OTEC's entire business. The design of high performance, motion control electronics with rapid design cycles, demanding technical requirements, and unforgiving schedules sets us apart. Call Orchid Technologies today!





ORCHID TECHNOLOGIES ENGINEERING & CONSULTING, INC.

Custom Engineering From Concept to Production

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