

MC500D SERIES 2-AXIS **BRUSHLESS MOTOR CONTROLLER**

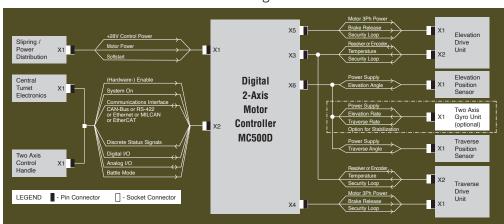


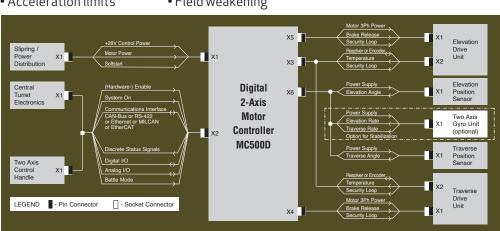
This series of digital militarized low voltage, 2-Axis, Brushless Motor Controllers is designed to provide torque, velocity and position loop closure. The controller accepts command signals from any fire control system (FCS) in either digital or analog format, and interfaces with a control handle. The advanced space vector algorithms provide optimum performance for new or existing motors to provide outstanding power densities. The base of the controller has four sets of holes predrilled for use with isolation mounts. There is also a cold plate model available that

has uprated current capabilities (400Apk/axis), see picture on page 2. Additionally, there are a wide range of end user programmable software features, as listed below.



- Extensive built in test
- No-fire zones
- End-damping limits
- Acceleration limits
- HUMS (Health Usage Monitoring System)
- Obstacle avoidance zones
 Comprehensive loop tuning
 - Tracking/Stabilization Modes Data logging
 - Field weakening
- Joystick shaping function
 - Analog and digital I/O
 - Status and fault history

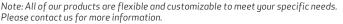












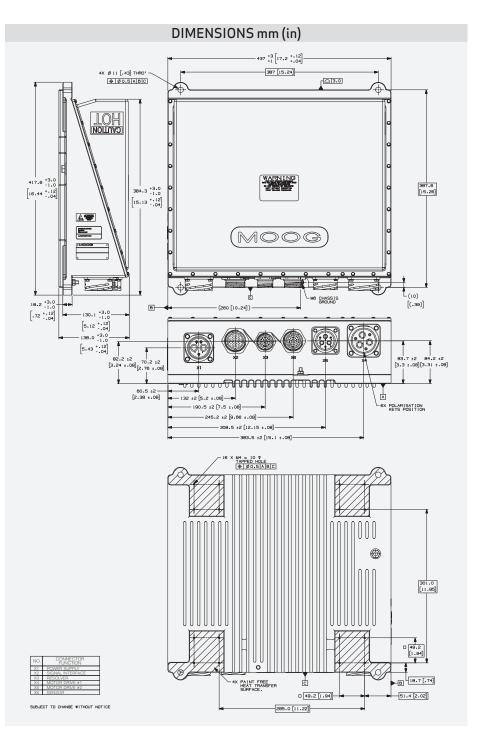


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| SPECIFICATIONS | |
|---------------------------------------|---|
| Parameter | Performance |
| Power Supply (Control Electronics) | 18Vdc-32Vdc (per Mil-Std-1275) |
| Power Supply (Motors) | 18Vdc to 60Vdc Motor |
| Temperature (Ambient) | -40°C to 65°C |
| Environmental Specification | Complies with Mil-Std-810 |
| Command Communication Interface | CAN-Bus or RS-422 or Ethernet or MILCAN or EtherCAT |
| EMC Specification | Complies with Mil-Std-461 |
| Weight | 22kg (48.4lb) |
| Position Sensor Interface | SSI or EnDat Serial Interface |
| Motor Commutation Sensor | Resolver or Encoder |
| Envelope | 418 x 437 x 138mm (16.5 x 17.2 x 5.4in) |
| Self Protection | Over-Temperature and Over-Current |
| Output Current Axis1/Axis2 | Finned: 300A/200A Peak Cold Plate: 400A/400A Peak |
| Option: Stabilization Kit | 2-Axis Gyro Interface |



MC500D 400Apk/axis Cold Plate Model





East Aurora, NY 14052 USA +1.716.652.2000 www.moog.com









