



GP500 Vehicle Master Controller

Product Highlights

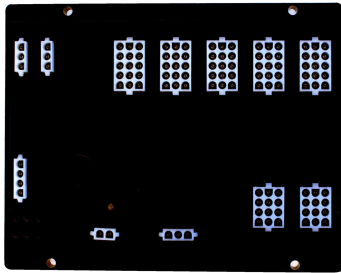
- Vehicle Master Controller with two independent CANbuses
- IC & Battery Powered Vehicles
- High I/O count...All types...High Side Digital Outputs, Analog, PWM, Digital Inputs, programmable I/O

The **GP500** Electronic Control Module provides full functionality for control of a boom or scissor lift vehicle, including tilt, overload, and automatic outrigger functions.

Its built-in I/O may be expanded with additional CAN-connected modules to create a complete control system for any machine while reducing wiring.

Examples of complete GP500 - based *Trionic* Control Systems include:

- **GP500** alone for a simple IC machine
- **GP500** + P600 + Matrix for a 48v electric scissor
- **GP500** + GP442 + P600 + either a SEM600 or a DAC483 for a 48V Electric Drive



TRIONIC
vehicle controls

General Features

- Provides protected high side outputs with current measurements
- Provides PWM outputs capable of Valve Current Control Mode (VCCM)
- Provides fail-safe high side outputs
- Integral vehicle tilt transducer, indicates tilted vehicle with optional cutout
- Two CANbus interfaces
- RS232 connection to hand-held "EZcal" for calibration and diagnostics
- "FLASH" memory allows configuration to specific customer needs
- Failsafe functionality to comply with EN 954-3
 - Series-wired dual output switches from independent microprocessors
 - Detects short-circuit output switches

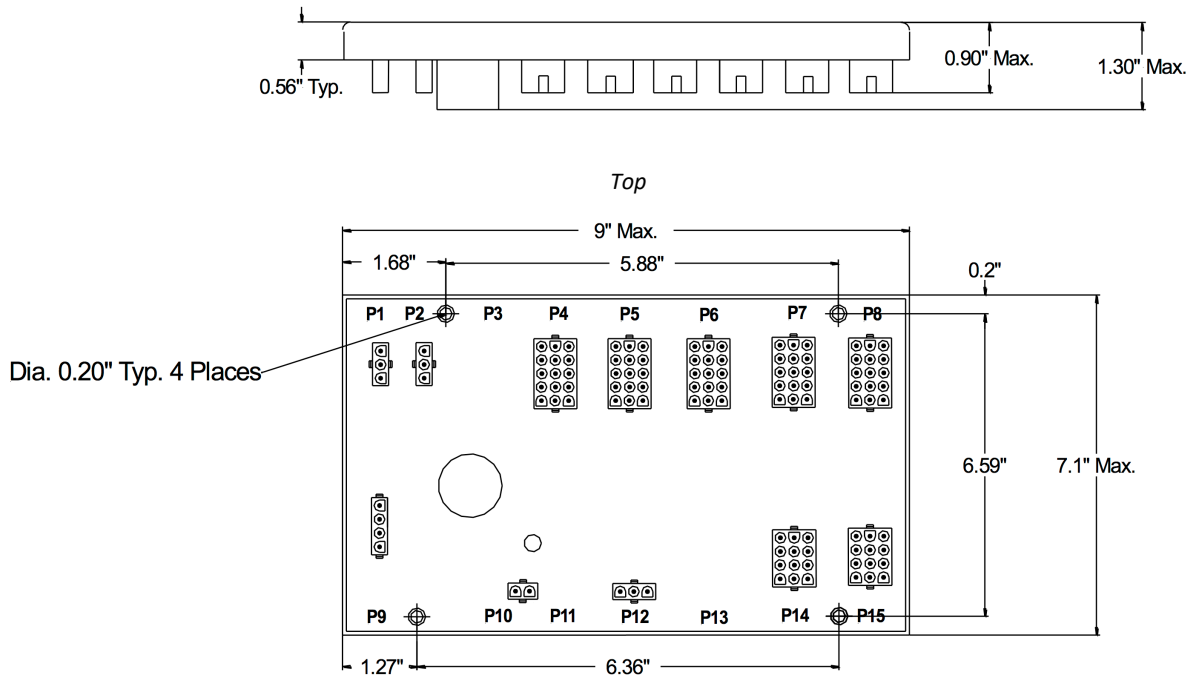
Technical Data

| | | | |
|--------------------------------|---|--------------------|---|
| Power Supply | 12/24V | 6 to 33 Vdc | |
| High Side Output | 16 | protected | |
| PWM Output (high side) | 24 | protected | Current control capable, 50 to 500Hz configurable |
| "Failsafe" Outputs (high side) | 4 | protected | series-wired separately controlled drivers (PWM) |
| 0-5V Output | 1 | protected | |
| Positive Digital Inputs | 32 | 1.25KΩ imp. | 6 RPM counters |
| Negative Digital Input | 4 | 1.25KΩ imp. | For chassis grounded sensor (2 RPM counters) |
| Analog Inputs | 9 | 0 to 10V | Protected (4 safe) |
| Integral Tilt Sensor | +/- 0 to 10° | $\sqrt{(x^2+y^2)}$ | |
| Water Proof | IP 67 | | |
| Working Temperature | -40 + 60°C | | |
| Overall Dimensions | 9.0" x 7.1" x 1.3" 229 x 181 x 33 mm | | L x W x H |



GP500 Vehicle Master Controller

Dimensions



Overall Dimensions
9.0 x 7.1 x 1.3
229 x 181 x 33 mm

Mounting Instructions

The GP500 control module requires special installation due to its integral tilt sensor. The module must be mounted, oriented at 0° or 90° to the direction of travel perpendicular to the ground, with the connectors at the bottom. Recommended fastening torque: 8lbs/inch max.