

#### **GP500**

# Vehicle Master Controller

### **Product Highlights**

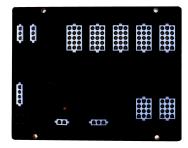
- Vehicle Master Controller with two independent CANbuses
- IC & Battery Powered Vehicles
- High I/O count...All types...High Side Digital Outputs, Analog, PWM, Digital Inputs, programmable I/O

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	8 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	$1.25$ K $\Omega$ imp.	6 RPM counters
Negative Digital Input	4	$1.25$ K $\Omega$ 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		LxWxH

EUROPE Trionic Mobility Systems, SAS AMERICAS PG Trionic, Inc.

ASIA Trionic Shenzhen Ltd.

www.trionicgroup.com

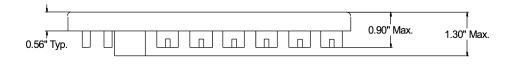
rev. 2 Page 1 of 2

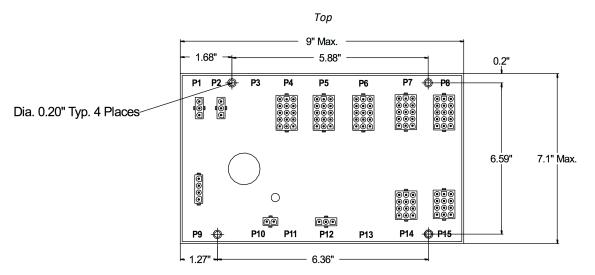


# **GP500**

Vehicle Master Controller

### **Dimensions**





# **Mounting Instructions**

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

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.

EUROPE Trionic Mobility Systems, SAS AMERICAS PG Trionic, Inc.

ASIA Trionic Shenzhen Ltd.