

### Product Highlights

- Integrated Dual Motor Drive and Vehicle Management System
- Proportional Control of Traction and Steering
- Built-in Tilt Sensor
- Overload per EN280

### General Features

- 2 x 2.6 HP traction motor controller and pump motor controller
- Proportional Traction and steering
- Integrated tilt sensor can be configured to limit or prevent selected functions when vehicle is tilted
- Platform overload can be configured for EN280 compliance (requires pressure sensor and height sensor [EZfit])
- Flash memory allows factory configuration to exact vehicle needs
- Inputs from platform joystick & switches (or ground mode emergency switches) control vehicle functions via protected valve & line contactor drivers
- Inputs from various cutout switches can be configured to limit or prevent selected functions depending on vehicle state.
- Dual micro-controller ensures failsafe operation
- Available **EZcal** hand-held allows access to configuration settings and diagnostics including history log (via RS232)
- All inputs & outputs can be tested with **EZcal** to identify wiring errors
- Integral status LED provides (flashing) fault code indication



TRIONIC  
vehicle controls

**Optional:** Text display module provides end-user status & fault descriptions to minimize down time

### Technical Data

<b>Power supply</b>	16 to 33 Vdc	Under and Over voltage shutdown Reverse battery protected
<b>Drive current</b>	2 x 80A	1 min.
<b>Peak current</b>	2 x 120A	
<b>PWM Frequency</b>	15 KHz	
<b>Integral tilt sensor</b>	+/- 0 to 10°	$\sqrt{(x^2+y^2)}$
<b>ON/OFF power outputs (6)</b>	3A	Automotive spec. protected drivers
<b>Proportional power outputs (2)</b>	3A	Automotive spec. protected drivers
<b>Indicator outputs (4/6)</b>	1A	Automotive spec. protected drivers
<b>Digital inputs</b>	13/15	Low impedance eliminates moisture problems
<b>Analog inputs</b>	6	0.5-4.5 Vdc, protected from wiring errors
<b>Water proof</b>	IP65	
<b>Ambient working temperature</b>	-40 to +50°C	Controller must be mounted to vehicle frame to provide heatsink
<b>Overall dimensions</b>	7.8" x 6.2" x 2 ¼ "	L x W x H (mm)
	199 x 158 x 58	

### Mounting Instructions

- The module should be installed vertically as shown below

### Installation & Connections

The TS100 control module requires special installation due to its integral tilt sensor. The controller must be mounted perpendicular to the ground, with the connectors at the bottom. To achieve full power capability, heat sink should be bolted to a large metal part of the chassis.

All dimensions  $\pm 0.01''$

