

RT93

Vehicle Master Controller

Product Highlights

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

The **RT93** Electronic Control Module provides full functionality for control of an AWP vehicle, integrated includes: display (with EZcal functionality), 10 switches, 14 indicators, tilt sensor, buzzer/alarm. Allows for complete machine control including 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 RT93 - based *Trionic* Control Systems include:

- RT93 alone for IC RT scissor (J1939 ready)
- RT93 + P600 for a 48V RT scissor with hydraulic drive
- RT93 + P442 + P600 + DAC483 for a 48V with electric AC drive



General Features

- Provides protected high side outputs with current measure diagnostics
- Provides PWM outputs capable of Valve Current Control Mode (VCCM)
- Provides fail-safe high side outputs
- Integral vehicle tilt sensor, buzzer, display, and operator controls
- Two independent CANbus interfaces
- "EZcal" integrated for calibration, adjustments, and diagnostics
- "FLASH" memory allows configuration to specific customer needs
- Failsafe functionality to comply with EN 954-3 and EN280

TRIONIC vehicle controls

Technical Data

Power Supply	12/24V		8 to 33 Vdc
High Side Output	4	protected	
"Failsafe" Outputs (high side)	36	protected	series-wired separately controlled drivers (x12 PWM)
0-5V Output	1	protected	
LED Indicators	10		Integrated on front panel (x10 customizable)
Positive Digital Inputs	35	1.25K Ω imp.	x5 RPM counters, x10 Integrated switches
Negative Digital Input	3	1.25K Ω imp.	For chassis grounded sensor and RPM counters
Analog Inputs	8	protected	0 to 5 V and 0 to 10v compatible (x3 safe)
Internal Tilt Sensor	+/- 0 to 10°	$\sqrt{(x^2+y^2)}$	
Internal Buzzer	100dB		
Water Proof	IP66	See Note 1	
Working Temperature	-40 + 60°C	See Note 2	
Overall Dimensions	10.4 x 7.2" x 2.2" 263 x 181 x 55 mm		LxWxH

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

ASIA Trionic Shenzhen Ltd.

www.trionicgroup.com

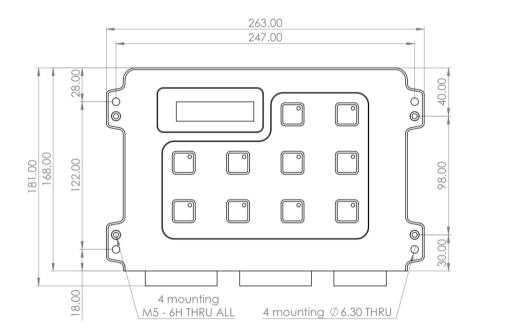
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Dimensions





Overall Dimensions 10.4 x 7.2 x 2.2" 263 x 181 x 55 mm

Note 1: IP66 from the front IP56 from the back

Note 2: Below -10°C Onboard Display may become difficult to read

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