

CONTROLLER OVERVIEW

	TCM-2000	TCM-2300
Physical		
Weight	0.89 lb	0.87 lb
Dimensions (L x W x H inches)	6.0 x 5.2 x 1.7	5.1 x 6 x 1.5
Case Material & Finish	Extruded Aluminum Blue Anodized	Aluminum Black Anodized
Operating Conditions		
Voltage Range	8-18 VDC standard (24 VDC models available)	
Current (device only, not including outputs)	On: 100 mA Quiescent: 0 mA	On: 100 mA Quiescent: 9 mA
Operating Temperature	-40 to 125°C	-50 to 125°C
Storage Temperature	-40 to 125°C	-55 to 150°C
Reverse/Transient Protections	Yes	Yes
Ingress Protection	IP62	IP50
Harness Interface	63-pin CPC	Delphi 56-pin
EMI Immunity	All modules are designed for robust EMI immunity. PCS offers certification testing for the desired controller/transmission package as a cost option.	All modules are designed for robust EMI immunity. PCS offers certification testing for the desired controller/transmission package as a cost option.
Communication		
Interface	1 x CAN 2.0b, 1 x RS-232	1 x CAN 2.0b, 1 x RS-232, 1 x GM ALDL
Real-time tuning and data logging with a PC	Yes	Yes
Real-time tuning and data logging with PCS hand-held interface	Yes	Yes
In-Field Flash Upgradable	Yes	Yes
Inputs		
Frequency (Range 0-10 kHz)	4	3
Programmable Trigger Levels and Filtering for Frequency Inputs	Yes	2 Channels
Analog Voltage (0-5 VDC)	6 total 2 with 1kΩ 5V pull-ups	2 total 1 with 1kΩ 5V pull-up
Programmable Input Parameters	Yes	Yes
Failure Diagnostics for each Analog Input	Yes	Yes
Digital (programmable active high or low)	16	6
Over Voltage Protection for Each Input	Yes	Yes
Outputs		
PWM	9	7
Digital	3	1
PWM & Digital Maximum Current	3.5 Amp	3.5 Amp
Short Circuit, Over Current & Thermal Protection	Yes	Yes
User Selectable Output Drive Type (Battery Voltage or Ground)	Yes	Ground Only
Programmable Output Type/Parameter for PWM and Digital Outputs	Yes	Yes
Output Channel Current Monitoring	No	1 Dedicated high-side measured output