



Transmission Controller Summary

	TCM-2000	TCM-2005	TCM-2006	TCM-2008	TCM-2100
General					
Manufactured at ISO 9001 Facility	Yes	Yes	Yes	Yes	Yes
1-Year Warranty (parts and labor)	Yes	Yes	Yes	Yes	Yes
Factory Tested and Burned In	Yes	Yes	Yes	Yes	Yes
Weight	0.89 lbs.	2.94 lbs.	2.86 lbs.	2.86 lbs.	0.87 lbs.
Dimensions (approx. L x W x H inches)	6 x 4.25 x 1.75	7.25 x 7.3 x 2.25	7.25 x 7.3 x 2.25	7.25 x 7.3 x 2.25	5 x 6.125 x 1.5
Case Material & Finish	Extruded Aluminum Blue Anodize	Machined Billet Aluminum Black Anodize	Machined Billet Aluminum Black Anodize	Machined Billet Aluminum Black Anodize	Extruded Aluminum
Operating Conditions					
Voltage Range	8 – 27 VDC	8 – 27 VDC	8 – 27 VDC	8 – 18 VDC	8 – 18 VDC
Current (device only, not including outputs)	On: 100 mA Quiescent: 0 mA	On: 100 mA Quiescent: 0 mA	On: 100 mA Quiescent: 0 mA	On: 200 mA Quiescent: 0 mA	On: 100 mA Quiescent: 9 mA
Operating Temperature	-40 to 125°C	-40 to 125°C	-40 to 125°C	-40 to 125°C	-40 to 125°C
Storage Temperature	-40 to 125°C	-40 to 125°C	-40 to 125°C	-40 to 125°C	-55 to 125°C
Reverse & Transient Voltage Protection	Yes	Yes	Yes	Yes	Yes
Ingress Protection	IP62	IP67	IP61	IP61	IP50
Harness Interface	63-pin CPC	37-pin Mil spec 6-pin Mil spec *6-pin is comm only not required for operation	37-pin CPC 16-pin CPC	37-pin CPC 16-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.				
Communication					
CAN 2.0b	1	1	1	1	1
RS-232	1	1	1	1	1
Real-time tuning and data logging with a PC	Yes	Yes	Yes	Yes	Yes
Real-time tuning and data logging with PCS hand-held touchscreen interface	Yes	Yes	Yes	Yes	Yes
In-Field Flash Upgradeable	Yes	Yes	Yes	Yes	Yes
Native Communication with PCS Devices	Yes	Yes	Yes	Yes	Yes
GM ALDL	No	No	No	No	Yes
Inputs					
Frequency (Range 0 – 10 kHz)	4	4	4	4	3
Programmable Trigger Levels and Filtering for Frequency Inputs	Yes	Yes	Yes	Yes	2 Channels
Analog Voltage (0-5VDC)	6 total 2 with 1kΩ 5V pull-ups	4 total 2 with 1kΩ 5V pull-ups	6 total 2 with 1kΩ 5V pull-ups	6 total 2 with 1kΩ 5V pull-ups	2 total 1 with 1kΩ 5V pull-up
Programmable Input Parameters	Yes	Yes	Yes	Yes	Yes
Failure Diagnostics for each Analog Input	Yes	Yes	Yes	Yes	Yes
Digital (programmable active high or low)	16	11	16	16	6
Overvoltage Protection for Each Input	Yes	Yes	Yes	Yes	Yes
Outputs					
PWM	9	9	9	9	7
Digital	3	2	3	3	1
PWM & Digital Maximum Current	3.5 Amp	3.5 Amp	3.5 Amp	3.5 Amp	3.5 Amp
Short Circuit, Overcurrent & Thermal Protection on each Output	Yes	Yes	Yes	Yes	Yes
User Selectable Output Drive Type (Battery Voltage or Ground)	Yes	Yes	Yes	Yes	Ground Only
Programmable Output Type/Parameter for PWM and Digital Outputs	Yes	Yes	Yes	Yes	Yes
Output Channel Current Monitoring	No	No	No	All 12 outputs selectable uses analog/digital inputs	1 Dedicated high-side measured output