

# CM2115

## Controller Module

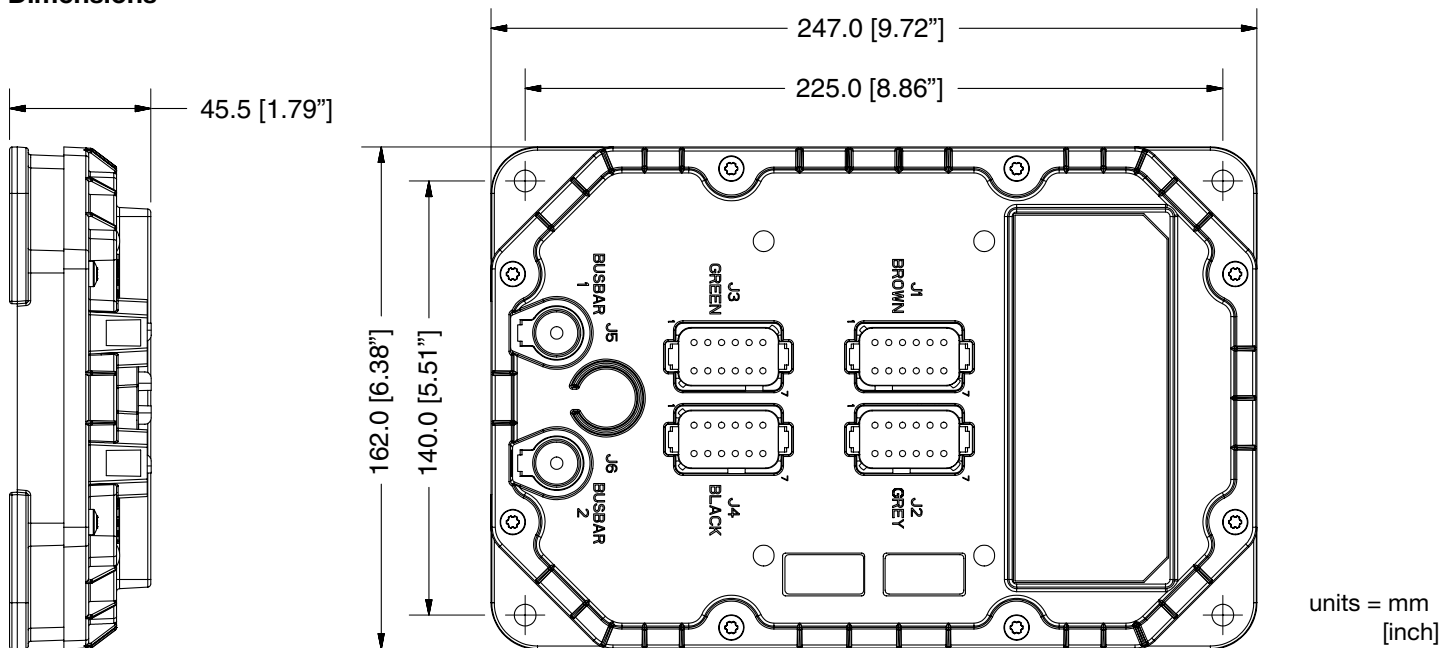


|                                   |  |
|-----------------------------------|--|
| <b>General</b>                    |  |
| Weight                            | 1.0 kg   |
| Operating temperature             | -40°C to +85°C   |
| Storage temperature               | -55°C to +125°C  |
| <b>Electrical</b>                 |  |
| System voltage                    | 12 V and 24 V  |
| Operating voltage                 | 6 V to 32 V  |
| Micro core capabilities           |  |
| Micro type                        | Freescale MPC5534 @ 80 MHz   |
| Flash size <sup>1</sup>           | 1 MB   |
| RAM size <sup>1</sup>             | 128 kB (64kB internal + 64kB external)   |
| EEPROM size                       | 32 Kbyte   |
| Communication channels            |  |
| CAN channels (J1939 compliant)    | 2 (1 with “Wake on CAN” functionality)   |
| Inputs                            |  |
| Digital inputs                    | 4 x programmable active high or active low<br>5 x programmable active low<br>2 x active high “wakeup” inputs |
| Analog inputs                     | 8 (2 x amplified, 6 x attenuated)  |
| Frequency inputs                  | 2 (1 x AC coupled, 1 x DC coupled)   |
| Maximum frequency                 | 10 kHz   |
| Outputs                           |  |
| High side outputs                 | 6 x 10 A<br>2 x 5 A<br>2 x 5 A with accurate current sensing<br>2 x 2.5 A with accurate current sensing      |
| Maximum PWM frequency             | 500 Hz   |
| Low side outputs                  | 1 x 2.5 A with accurate current sensing  |
| Maximum PWM frequency             | 1500 Hz  |
| Solid state relay outputs         | 2 x 1 A  |
| Reference voltage (sensor supply) | 1 x selectable 5 V/8 V @ 300 mA  |
| Maximum module current            | 80 A   |
| Status LEDs                       | Not on standard unit   |
| <b>Mechanical</b>                 |  |
| Enclosure Material                | Plastic and aluminum   |
| Connector                         |  |
| Type                              | 4 x 12 pins, 3 x 1 pins, 51 pins total<br>Deutsch DT series  |
| Mounting Method                   | Four 1/4” or 6mm bolts   |

1) total product memory, not all is available to the application.

|  |  |
|--|--|
| <b>Software</b>                            |  |
| Software environment<br>Platform framework | Provides the application developer with the drivers required to access the hardware      |
| Software Development Kit (SDK)             | Provides the interface between the platform framework and the application software       |
| Application software                       | Matlab Simulink (can be developed by the OEM or Parker)                                  |
| <b>Environment</b>                         |  |
| Humidity (soak)                            | ASAE EP455_Feb_2008_section 5.13.1   |
| Humidity (cyclic)                          | ASAE EP455_Feb_2008_section 5.13.1   |
| Dust/Water Ingress Protection              | IP66, 60529 IEC Edition 2.1 2001-02 section 13.6.1 and section 14.2.6                    |
| Salt spray                                 | J1455 (Aug 94) Section 4.3.3   |
| Vibration, shock                           | ASAE EP455_Feb_2008_section 5.14.1   |
| Vibration, random                          | SAE J1455_Jun_2006_section 4.10.4.2 Figure 10  |
| ESD  | ANSI/ASAE EP455_Feb_2008_Section 5.12.2  |
| EMC  |  |
| Susceptibility<br>Emissions                | ANSI/ASAE EP455_Feb_2008_Section 5.16.3/ISO 14982/SAE J1113-41<br>ISO 14982/SAE J1113-41 |
| <b>Ordering</b>                            |  |
| Ordering part number                       | 0935024ECD   |

## Dimensions



### WARNING - California Proposition 65

This product can expose you to chemicals including NICKEL COMPOUNDS which is known to the State of California to cause cancer.  
For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

