

Electronic Systems

MULTIPLEX CONTROL MODULE - MCM



AT A GLANCE

- Rugged multiplex control module for 12 VDC applications
- Built-in battery guardian that monitors and protects the battery against discharge
- J1939 to communicate with power train modules like engine, ABS, transmission and cluster
- CAN bus (J1939 or RVC) to communicate with other Megalink™ modules
- LIN data bus
- Low side and high side digital inputs
- MCM's can be combined in a master/slave configuration based on I/O requirements

Megalink™ is the perfect platform to empower your electronics with flexibility and control.

The MCM provides engineers with the flexibility and freedom to design electronic control systems for vehicular applications. The unique enclosure of the MCM monitors and reports the status of numerous solid state inputs and outputs, whilst the built-in battery guardian protects the battery from discharge by automatically disconnecting it if the voltage drops below 12V (separate disconnect relay required). Its rugged design ensures it can withstand extreme off-road environments.

The MCM can easily be combined with any other Megalink™ products including keypads, H-bridge modules, digital rocker switches, displays etc. to create a full scale multiplex control system for virtually any type of on-road or off-road vehicle.

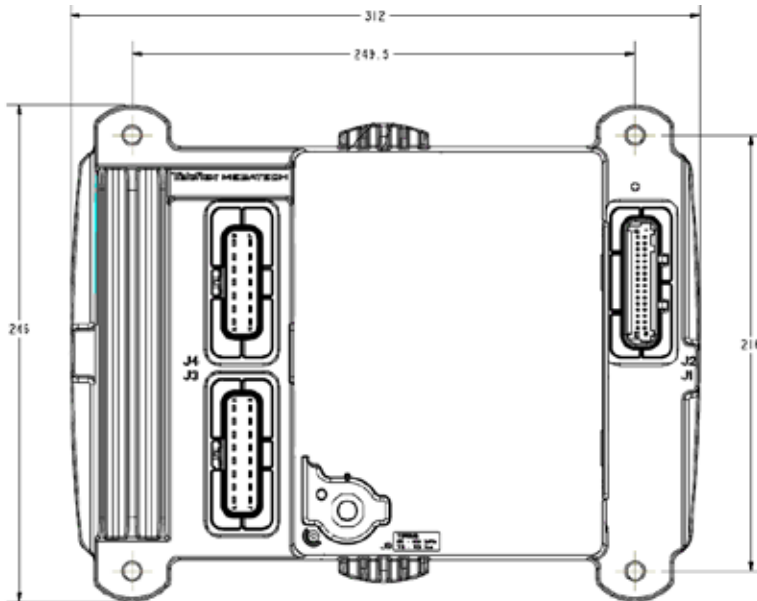
Typical applications for the MCM include: Battery power distribution and control, Interior / Exterior lighting with dimming and diagnostic capabilities, Engine starter control, Air System control and many other vehicle functions.

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MEGALINK™

PRODUCT SPECIFICATIONS - MOUNTING AND DIMENSIONAL INFORMATION



GENERAL SPECIFICATIONS & TECHNICAL DATA

- Operating voltage: 9 to 16VDC (5 to 16 VDC for engines with crank inputs)
- Operating temperature: -40° C to 85° C
- Maximum current: 125A continuous @ 85°C
- Standby current: < 4mA
- Immunity to radiated interferences: 100 V/m
- Water resistance: IP67, (1 meter under water)
- Electrical protection: Load Dump, 12V jump start, reverse polarity, ESD
- Diagnostics:
 - Blown fuse, defective relay, overload and open circuits
 - Diagnostic events stored in EEPROM
 - Field flashable
 - Windows™ based diagnostics via CAN using CADET software
- Connectors:
 - Delphi Metripak GT280, 14 and 16 pins
 - Delphi Metripak 100, 32 pins
 - M10 battery connection stud

* Windows is a trademark of Microsoft, Inc.

AT A GLANCE:

- 6 switch to battery digital inputs
- 6 switch to ground digital inputs
- 4 analog inputs
- 19 high-side 10A solid state outputs
- 4 high-side 7A solid state outputs
- 6 high-side 2A solid state outputs
- 5 low-side 2A solid state outputs
- 1 H-bridge 5A solid state output to control a battery disconnect relay
- 1 CAN bus
- 1 LIN bus
- Maximum current of 125A @ 85° C
- M10 stud for easy battery connection with a single wire