

Electronic Systems

MULTIPLEX CONTROL MODULE WITH FUSE BOX- MCM-F

AT A GLANCE

- Rugged multiplex control module for 12 VDC applications
- Combination of solid state outputs plus fuses and relays
- Built-in battery guardian monitors and protects the battery against discharge
- CAN bus (J1939 or RVC) to communicate with other MEGALINK modules
- LIN data bus
- 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-F provides engineers with the flexibility and freedom to design electronic control systems for vehicular applications. The unique enclosure of the MCM-F combines a fuse and relay center that knows and reports the status of all fuses and relays and numerous solid state inputs and outputs. The built-in battery guard controller continuously monitors the battery and disconnects it if the voltage drops below 12V (separate disconnect relay required). Its rugged design can withstand extreme off-road environments.

The MCM-F 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.

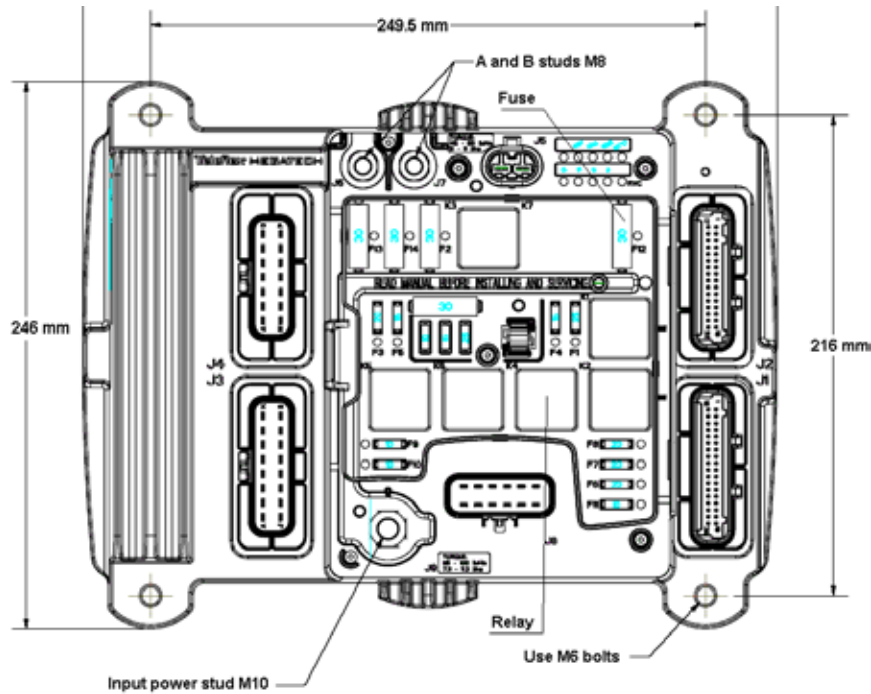
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MEGALINK™

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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 software via CAN (CADET)
- Connectors:
 - Delphi Metripak GT280, 12, 14 and 16 pins
 - Delphi Metripak GT480, 2 pins
 - Delphi Metripak 100, 32 pins
 - M8 fused output studs
 - M10 battery connection stud

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)
- 3 fused outputs 30A
- 3 fused outputs 20A
- 3 fused outputs 10A
- 1 relay output 40A
- 1 relay output 25A
- 1 relay output 20A
- 2 relay output 15A
- 1 CAN bus
- 1 LIN bus
- 1 M10 Stud for easy battery connection with a single wire
- Maximum current of 125A @ 85° C