



M-Flex is Marlin's new family of off-the-shelf electronic controls designed for severe duty, outdoor mobile applications.

The M-Flex Product line are standard control components that are your quick-to-market option that provide flexibility in terms of software and hardware customization.



8IN 8OUT M-FLEX REMOTE CAN I/O CONTROLLER

This severe duty controller provides 8 configurable inputs and 8 configurable outputs designed to operate on heavy duty equipment. Outputs are capable of driving various types of loads including valves, lights, motors and actuators up to 3A. Closed-loop current control is provided for proportional solenoid valves for sensitive control applications. Configuration is performed through messages sent via the CAN bus or through the use of Marlin's PC-based configuration software. The controller can also come pre-programmed from Marlin with functionality specific to your application requirements.

Applications



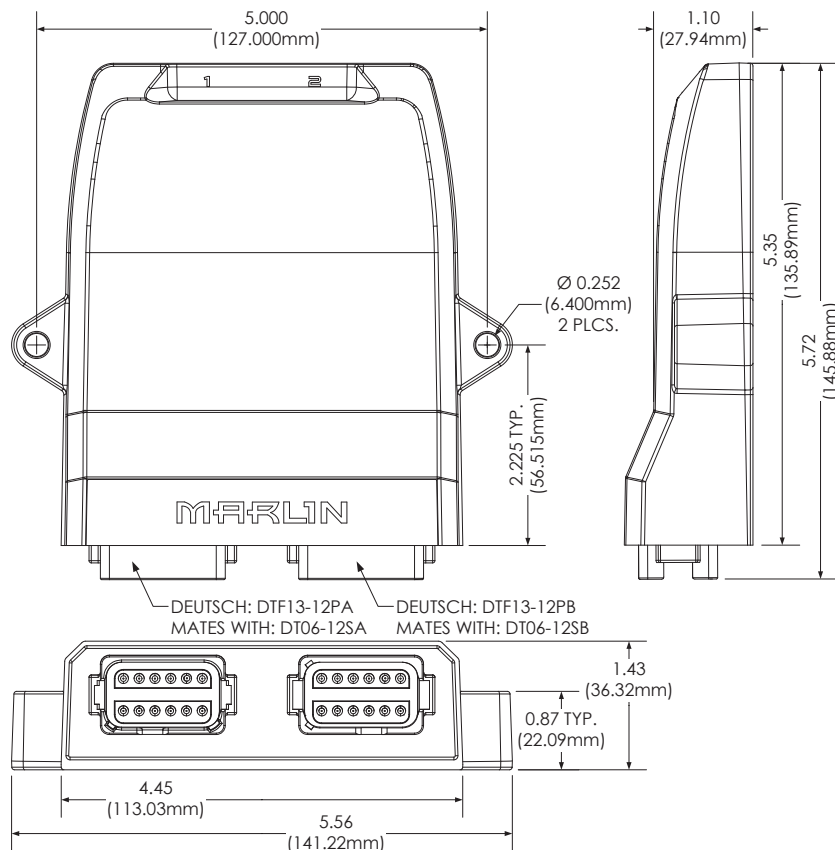
- Designed for severe duty, outdoor mobile applications.
- Wide operating voltage and temperature (12V and 24V applications).
- Low power sleep mode – for applications requiring direct-to-battery connection. Wake on digital input, CAN message or cycling power.
- Configurable inputs and outputs for customizing controller to each application.
- Outputs have closed-loop current sensing for accurate control of proportional valves.
- 250/500 Kbps auto baud detect.
- 5V, 500mA output for powering sensors.
- Slim, stylish case (custom OEM label option).
- Fully encapsulated electronics for complete environmental protection.
- Deutsch DT style connectors.
- Bi-color status indicators.
- IP67 and IP69K rated (with appropriate connector boots).
- RoHS and CE compliant.
- Multiple programming options:
 - Standard controller programmed as remote I/O module for control by Master Control Unit (MCU) via CAN.
 - Custom application programming provided by Marlin.
 - Customer programmable via C language.

FEATURES

Specifications

Supply Voltage	8 - 36VDC operating range, reverse polarity protected.
Max Current Sourcing	24A total across 8 outputs.
Max Current Sinking	12A total across 4 outputs.
Communication	SAE J1939 CAN 2.0A and CAN 2.0B compliant (CANopen optional).
Baud Rate	Auto detection for 250/500 Kbps.
Inputs	(8) inputs that can be configured as analog, digital, frequency, PWM, or a quadrature encoder. (4) inputs can also be 11-20mA or resistive inputs.
Outputs	(4) half-bridge PWM outputs rated at 3A. These 4 outputs have high-side current sensing for accurate closed-loop proportional control of solenoid valves. (4) digital current-sourcing outputs rated 3A configurable as on/off or open loop PWM.
Sensor Supply	5 VDC, 500 mA max.
LED Indicators	(2) red/green bi-color for power and CAN communication status.
Connector	Deutsch DTF13-12PA and DTF13-12PB equivalent.
Mounting	(2) M6 or 1/4" Screws.
Ingress Protection	IP67, IP69K (with appropriate connector boots).
Operating Temperature	-40° to 85°C (-40° to 185°F).
Storage Temperature	-40° to 85°C (-40° to 185°F).
Weight	0.45 kg (1.00 lbs).
Packaging	Electronics encapsulated in nylon enclosure.

Dimensions



For a detailed specification: visit www.marlintech.com/m-flex
 Ordering Information: visit www.marlintech.com or call 920-485-4463