

# M-FLEX REMOTE CAN I/O CONTROLLER

The 8-in / 8-out M-Flex Remote CAN I/O Controller is designed for severe duty, outdoor mobile applications and built to withstand the harsh temperatures, shock and vibration, moisture and electrical transients that are common to these environments.



M-Flex Controllers are typically used for construction, agriculture and turf care equipment, utility and power sports vehicles, marine, military, outdoor power equipment and similar harsh environment applications.



## FEATURES

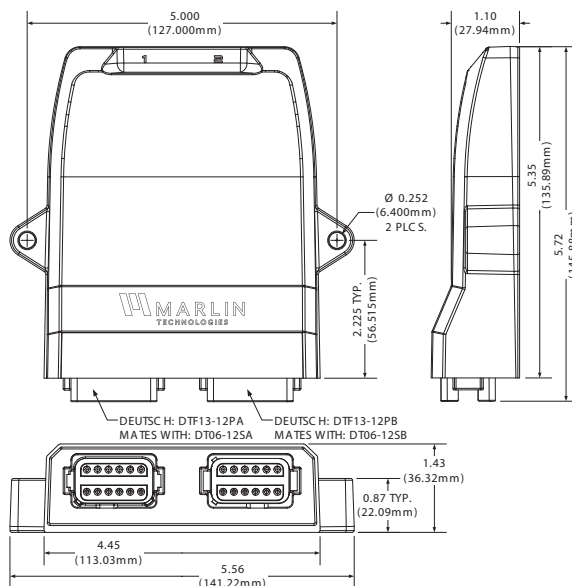
- Designed for severe duty, outdoor mobile applications.
- Designed for 12V and 24V applications.
- Low power sleep mode – for applications requiring direct-to-battery connection. Wake on digital input, CAN message or cycling power.
- Configurable inputs and outputs for customizing controller to each 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.

## SPECIFICATIONS

Specifications subject to change without notice. \ Revised 11.19

<b>Supply Voltage</b>	8 - 36VDC operating range, reverse polarity protected.
<b>Max Current Sourcing</b>	24A total across 8 outputs.
<b>Max Current Sinking</b>	12A total across 4 outputs.
<b>CAN Protocol</b>	SAE J1939 CAN 2.0A and CAN 2.0B compliant, CAN Open, NMEA 2000
<b>Baud Rate</b>	Auto detection for 250/500 Kbps.
<b>Inputs</b>	(8) inputs that can be configured as analog, digital, frequency, PWM, or a quadrature encoder.
<b>Outputs</b>	(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.
<b>Sensor Supply</b>	5 VDC, 500 mA max.
<b>LED Indicators</b>	(2) red/green bi-color for power and CAN communication status.
<b>Connector</b>	Deutsch DTF13-12PA and DTF13-12PB equivalent.
<b>Mounting</b>	(2) M6 or 1/4" screws.
<b>Ingress Protection</b>	IP67, IP69K (with appropriate connector boots).
<b>Operating Temperature</b>	-40° to 85°C (-40° to 185°F).
<b>Storage Temperature</b>	-40° to 85°C (-40° to 185°F).
<b>Weight</b>	0.45 kg (1.00 lbs).
<b>Packaging</b>	Electronics encapsulated in nylon enclosure.

## DIMENSIONS



For a detailed specification visit  
[marlintech.com/m-flex](http://marlintech.com/m-flex)

Marlin Technologies, Inc.  
101 Industrial Drive \ P.O. Box 123  
Horicon, WI 53032-1803  
920.485.4463 \ P  
920.485.2899 \ F

**MARLINTECH.COM**  
PROUDLY MADE IN THE USA