

Control Systems Inc. has created a complete suite of Engine Control Modules (ECMs) for OEM and niche customer applications serving the industrial, marine, off-road, recreational, and heavy-duty markets. Our ability to engineer new products quickly offers you total customization in your product to meet your needs. CSI can help you through the complete development program by offering calibration, durability and emissions testing services assisting you from concept to MOR.

the **Control Specialists**



Features & Options

- Hermetically sealed enclosure with a Molex connector
- Temperature sensors
- Pressure sensor input
- E-Stop switch input
- Engine stop solenoid output
- Malfunction indicator lamp
- PWM output
- Two (2) switched inputs
- Two (2) auxiliary inputs
- Four (4) analog outputs
- Two (2) digital outputs
- CAN bus interface

The EMS-1 is designed to interface with O.E.M. sensors and communication protocols. It is designed to be a cost effective I/O module geared towards the commercial vehicle and industrial controls market. The EMS-1 can be customized for OEM specifications. Whether it's a standalone electronic control unit, I/O expansion or a CAN-BUS node.



At CSI, our engineers understand the demands of commercial vehicles and develop custom controls to suit.

INPUTS

- PRESSURE SENSOR #1
- PRESSURE SENSOR #2
- TEMP. SENSOR #1
- TEMP. SENSOR #2
- SWITCHED INPUT #1
- SWITCHED INPUT #2
- ANALOG INPUT #1
- ANALOG INPUT #2
- E-STOP SIGNAL

EMS-1
 Stand-alone
 Electronic Control Module
 I/O Expansion Module
 Can-bus Node

OUTPUTS

- SHUTDOWN SOLENOID
- PWM OUTPUT #1
- ANALOG OUTPUT #1
- ANALOG OUTPUT #2
- ANALOG OUTPUT #3
- ANALOG OUTPUT #4
- DIGITAL OUTPUT #1
- DIGITAL OUTPUT #2
- MIL

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