# CAN Signal Modifier

**NOVELLUS**
engineering services
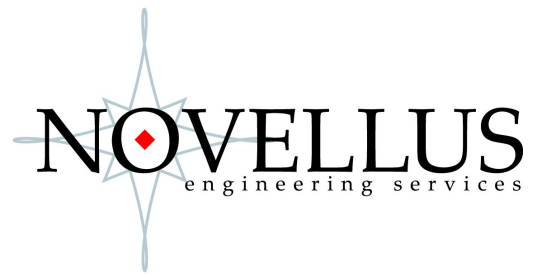
## Description:

The CAN Signal Modifier intercepts CAN/CAN-FD messages, modifies them by applying an offset and scalar, and sends them to the original receiver. This modifier is configurable through the USB compatible software. Primary uses include calibration development, verification and simulating faults for OBDII monitors within the new EPA regulations.
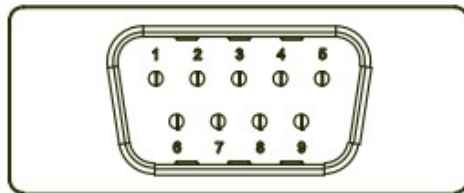


## Basic Operation:

This module intercepts a selected CAN message, modifies the message and sends out that modified CAN message. The specified message is modified by using a linear algorithm, $y = mx+b$. The device would be set up through a user interface via a USB connection to a laptop.

**DB9 Female Pinouts**
**CAN_IN:**

(1) NC

(2) CAN-L

(3) GND

(4) NC

(5) NC

(6) NC

(7) CAN-H

(8) NC

(9) +12V



**DB9 Female Pinouts**
**CAN_OUT:**

(1) NC

(2) CAN-L

(3) GND

(4) NC

(5) NC

(6) NC

(7) CAN-H

(8) NC

(9) +12V

## CAN Signal Specification:

| Signal Name | Pin Number | Signal Description |
|---|---|---|
| N\C | 1,4,5,6, & 8 | Not Connected |
| CAN_L | 2 | CAN Low |
| GND | 3 | Ground |
| CAN_H | 7 | CAN High |
| +12V | 9 | +12V Input |

## Electrical Specifications:

| Signal | Minimum | Typical | Maximum |
|---|---|---|---|
| Input Supply Voltage | +7 VDC | +12.7 VDC | +20 VDC |
| Input Supply Current | | 30 mA | 100 mA |

# Dimensions LxWxH: (116x90x45)mm