

Gateway 3



Overview

The Gateway 3 is DGE's third-generation CAN / J1850 gateway for vehicles with hybrid communications systems.

The Gateway 3 provides messages translation across differing vehicle networks, such as CAN / GMLAN to J1850 / GM Class2 and vice versa. The Gateway 3 incorporates up to four CAN channels and one J1850 VPW channel. One LIN channel may also be added.

In addition to message translation, the Gateway 3 can also transmit messages based upon switch or sensor I/O and control I/O (relay drivers, LEDs, etc) based upon message receipt.

The Gateway 3 is configurable to support High-Speed CAN, Low-Speed Fault Tolerant CAN, Single-Wire CAN, J1850 VPW / GM Class2, and LIN protocols.

Benefits

The Gateway 3 enables faster vehicle development by allowing CAN modules to be integrated into J1850-based vehicles or J1850 modules to be integrated into CAN-based vehicles.

Flash re-programmability allows for Gateway 3 software updates supplied by DGE to be easily uploaded via the GW3 RS-232 port connected to a PC running HyperTerminal. The user can enable or disable transmit messages using the J2190 protocol.

DGE Inc.

2870 Technology Drive Rochester Hills, MI 48309

Email: sales@dgeinc.com Phone: 248.293.1300 Fax: 248.293.1309

Software

DGE will customize the Gateway 3 software to meet customer requirements for specific applications. Software customization allows:

- Periodic message generation with message signals based on sensor (analog) or switch inputs
- Ability to control outputs based on message content
- Translation of messages between vehicle buses (CAN <-> J1850, CAN <-> CAN, CAN <-> LIN)

Features

- Up to four CAN bus interfaces configurable to support High-Speed CAN (GMLAN), Single-Wire CAN (GMLAN), IHS CAN, and Low-Speed Fault Tolerant CAN.
- One J1850 bus interface (DCX J1850 / GM Class2 Single-Wire, 10.4KHz, VPW)
- One optional 20 Kbps LIN interface
- RS-232 interface for flash re-programmability
- DBC-file based CAN messages
- Transmit message enable/disable via J2190 protocol
- 8 status/activity indicator LEDs
- Up to 8 digital inputs and 16 digital outputs
- Up to 8 analog inputs
- One counter-timer input
- Separated sensor and power grounds
- Configurable to power-on via battery feed, switched battery (ignition), or via bus wakeup
- PCB breadboard area for custom hardware

Specifications

- -40 °C to +85 °C operation
- 9V to 16V operation (200mA typical)
- 6.5" x 4.2" x 1.6" metal housing

