

# VGD Series

Vehicle Gas Detector for Oxygen, CO or Other Toxic Gases,  
with CAN bus Digital Output

## FEATURES

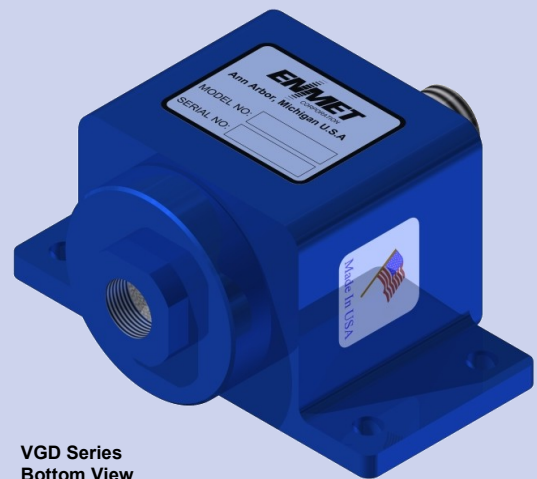
- Multi-Message CAN bus Digital Output Beacon for Use in Monitoring by Vehicle Control System
- RS-485 Digital Input/Acquisition for Calibration
- Small Footprint
- RFI/EMI Resistant
- Robust Integrated Mounting Flange Enclosure Resistant to Vehicle Shock and Vibration
- Resistant to Vehicle Environments/Contaminants
- Replaceable Electrochemical Sensor
- Excellent Chemical Selectivity

## SPECIFICATIONS

<b>Size, Approx:</b>	4.5 x 4.0 x 2.25 inches (114 x 102 x 57 mm)
<b>Weight:</b>	1.1 lbs (499 g)
<b>Enclosure Material:</b>	Solid machined aircraft grade 6061 aluminum
<b>Connector:</b>	MIL Spec Series III Circular Polarized connector
<b>Input Voltage Range:</b>	9 to 36 VDC
<b>Output:</b>	Digital CAN bus (Output Beacon Only)
<b>Current Draw:</b>	< 50 mA
<b>Temperature Range:</b>	-22°F to +122°F (-30°C to +50°C)
<b>Humidity Range:</b>	5% to 90% RH, non-condensing
<b>Pressure Range:</b>	Atmospheric $\pm$ 10%



The VGD series Sensor/Transmitter utilize electrochemical type cells to detect the target gas. These cells consist of electrodes, electrolyte and an air/liquid separation barrier. Gas molecules enter the cell and, as a result of an oxidation/reduction reaction, generate an electrical current proportional to the gas concentration. This current is measured, conditioned, and converted to the gas concentration digitally transmitted as a CAN bus beacon output signal. The data is also available for acquisition via RS-485 Modbus RTU. Calibration is handled via a PC interface software. These sensor/transmitters can also be connected to various computer based instrumentation for data acquisition and control.



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