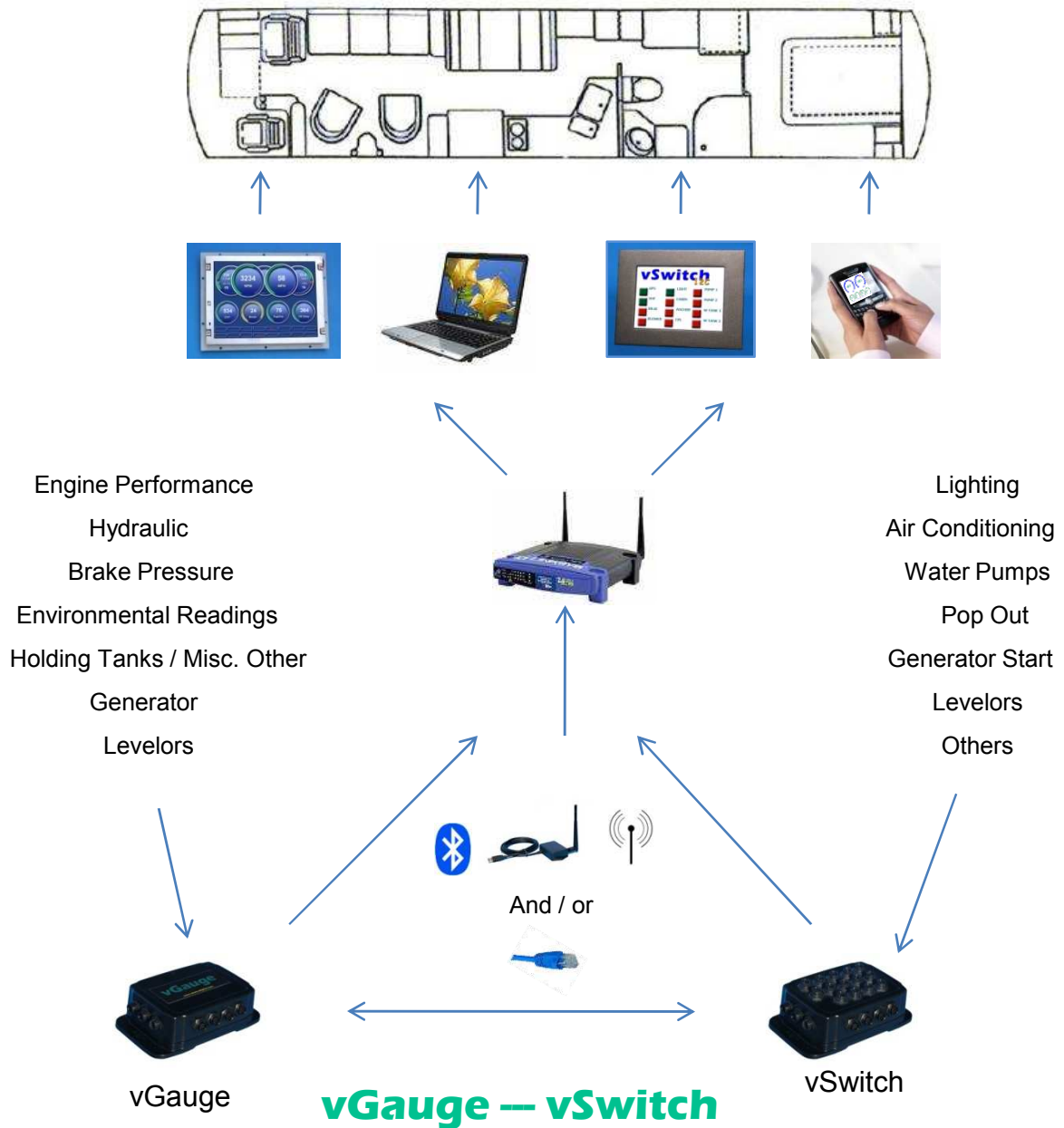




# Next Level Coach, Inc

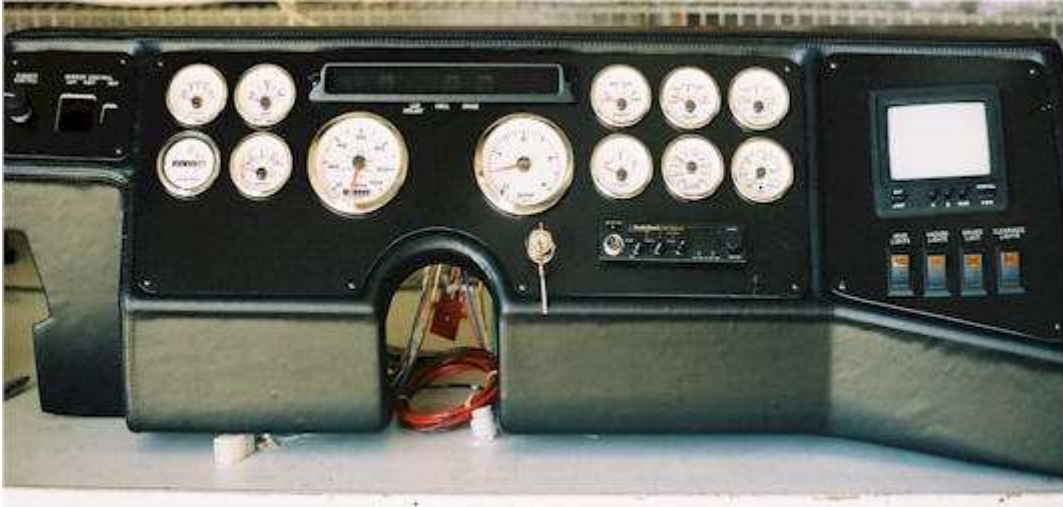
Proud to introduce to the Bus RV world....  
The latest in Solid State Technology

Dash upgrades in High Quality at Fair Prices  
designed by  
*Chetco Digital Instruments*  
Call **610-767-8000** today for more information



# vGauge Digital Accuracy

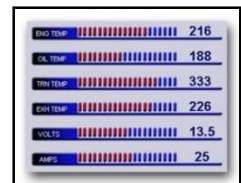
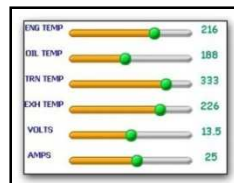
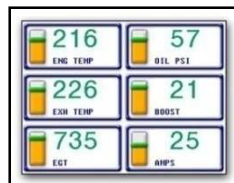
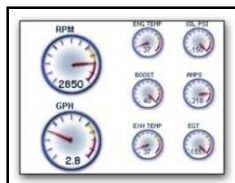
## Analog Dash



## New Digital Replacement



## User Selectable Page Themes



# vGauge Performance Monitoring System

Chetco Digital Instruments consist of 4 products levels –

Remote Gauge units, Remote Switch units, Instrument Displays, and interface adapters such as wireless and serial (RS232).

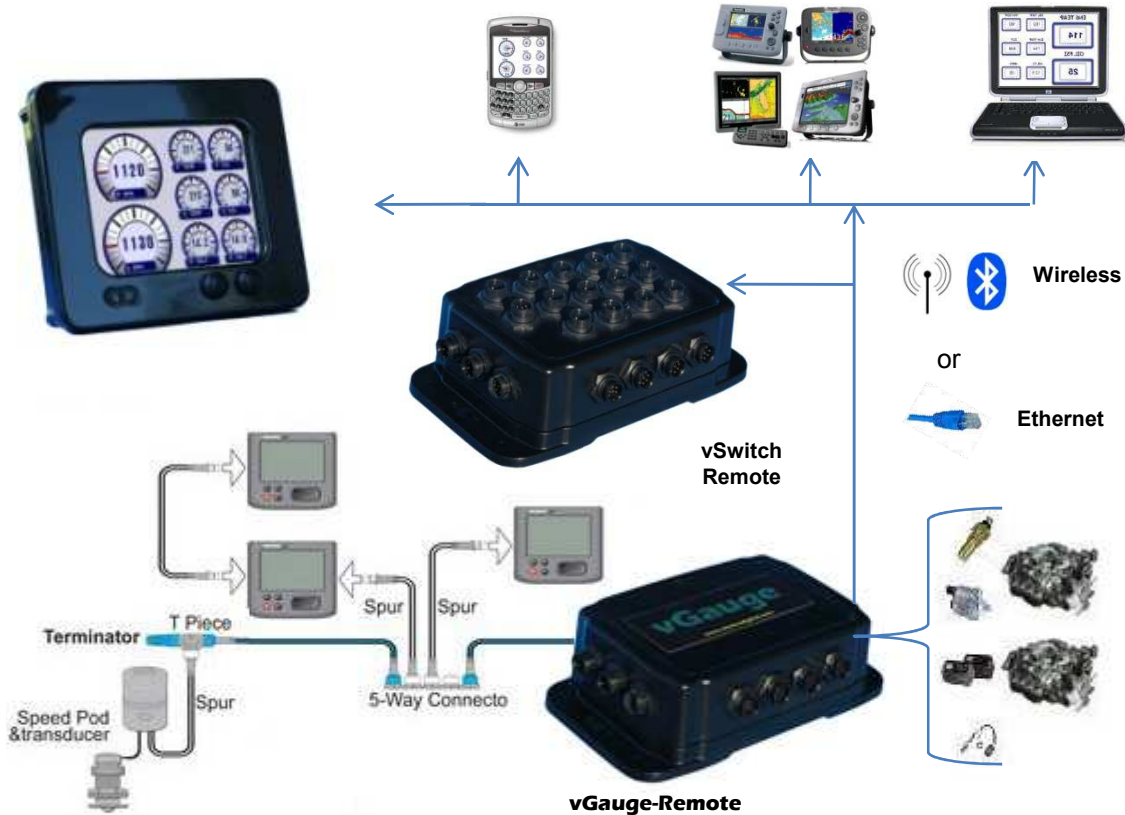
All products are controlled and configured by the vDash software for real-time display LCD monitors, or PC/Laptop. vGauge Remote can utilize already installed senders or new senders for expanded instrumentation.

All products are modular and can be integrated into a master networked automotive monitoring and switching system.

Each Gauge function has user settable Hi-Low alarms with audio and visual indicators. Adding a vSwitch Remote unit allows alarms to control switch activation or de-activation - adding an advanced level of security.

Chetco Digital Instruments products are designed to work with older diesel/gasoline engines or the newest power plants. vGauge units interface with standard analog engine senders/sensors and provide a bridge to data devices such as GPS/Sonar displays.

vGauge products offer affordability and long life while the vDash software gives users the freedom to control the way performance data is viewed, logged and remotely accessed. Its wireless options include Bluetooth, LAN and internet.



**vGauge Remote** units act as an interface bridge allowing older diesel and gasoline engine sensor input data to be displayed on any vGauge color touch screen display or compatible NMEA 2000 devices.

**vGauge Remote** can combined traditional VDO type sensor data with newer NMEA 2000 senders into a common protocol for distribution throughout the vessel. Older gauges can now be replaced with large color SeaGauge displays or other NMEA 2000 devices. The vGauge Remote units feature two data, ports allowing vGauge displays and NMEA 2000 devices to operate individually or in tandem.

**vGauge** vDash software allows users to select and download a wide range of sensor algorithms and display themes. vDash enables users to layout the design and look of the gauge panel, enabling the user to choose the format such as dials, bar graphs, text and more. Formats can be mixed and matched to fit the users preference. vDash software also allows users to view and data log engine performance in real time engine using any windows based PC or Smartphone. This feature offers reviewing of data and can act as an engine diagnostic tool.

**vGauge** optional Wi-Fi and Bluetooth wireless transmitters enable Gauge data to be displayed around the vehicle on any vGauge color display or other enabled device such as PDA or Smartphone. This feature allows for wireless placement of displays in any area of the Bus RV. With Wi-Fi and an internet connection, users can view and control gauges and switches from home or away. From any internet connection users can monitor and control bilge, battery level, fuel level, waste water, fresh water levels or turn on or off Bus RV lighting, radio's etc.

All vGauge products are easy to install and operate.

# Color Touch Screen Displays for use with vGauge and vSwitch Remote Modules



**vGauge Displays** are designed for use with the vGauge Remote Engine interface unit and the vSwitch Remote Switch unit to create a complete automotive instrumentation system. These displays utilize a sealed ABS or aluminum case for durability and resistance to moisture and corrosion. A wide assortment of display sizes make it easy to view high resolution 3D graphics and text. Multiple displays can be easily added.

## vGauge G24N

### 8.4" Color Touch Screen Display

**vGauge G24N** 8.4" diagonal display is compatible with vGauge Remote or vSwitch Remote units. This advanced large format (VGA) graphic LCD "Touch Screen" is easy to read in bright sunlight. Simply attach to compatible **vGauge Remote** and get real-time color display of engine data with 8 user "touch" selectable graphical data layouts. It is ideal for multiple engines such as diesel engines and diesel generators.



Available with Aluminum Bezel

## vGauge G12C

### 5.7" Color Touch Screen Display

**vGauge G12C** 5.7" diagonal display is for use with any vGauge Remote or vSwitch Remote unit. This advanced large format (QVGA) graphic LCD "Touch Screen" display is a touch sensitive LCD display and is easy to read in bright sunlight. Simply attach to **vGauge Remote** for a complete digital instrumentation system. It is ideal for primary or secondary viewing of single or multiple engines such as diesel engines and generators.



As shown with optional aluminum bezel

## vGauge G12N

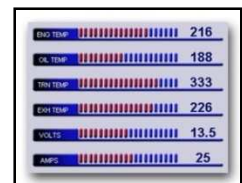
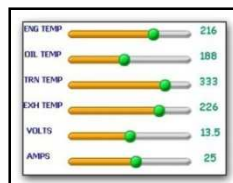
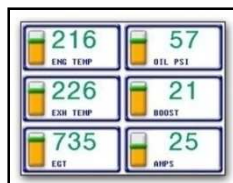
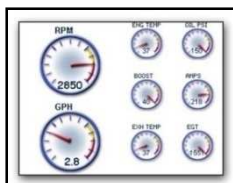
### 4" Color Touch Screen Display

**vGauge G12N** 4" diagonal display is meant to be used with vGauge Remote Gauge and vSwitch Remote units. This advanced sealed (QVGA) graphic LCD "Touch Screen" display is rugged enough for exposed locations. The touch sensitive LCD display is easy to read in bright sunlight. Simply attach to compatible **vGauge Remote**. This display is also perfect for mounting directly in the engine compartment or other locations throughout the bus for secondary monitoring and control.



Aluminum bezel

*Touch the screen --- Change the view*



# vGauge Remote Digital automotive Gauge



**vGauge Remote** is a multi-function digital automotive gauge. Now get digital instrumentation for a variety of performance parameters such as tachometer, rpm, oil pressure, engine temperature, fuel level, voltmeter, main and auxiliary battery, and much more all in a compact sealed design. The addition of the wireless interface allows existing automotive engines and equipment to be monitored in multiple locations using compatible displays. Housed in a solid ABS water-tight box measuring only 6.762" wide x 2.28" tall x 2.5" deep. to fit easily into any configuration.

**vGauge Remote** replaces existing gauges while using already installed senders. Programmable calibration tables can be matched to almost any instrument. When coupled with an optional **vSwitch** or wireless antenna the **vGauge Remote** is a stand alone engine monitoring solution. Easily connect to a PC to data log and perform engine diagnostics for all analog sensor inputs.

## vGauge Remote Features

- ✓ Included vDash Software allows your vGauge remote to interface with Chetco Digital displays, Windows based PC products and windows based smart phone devices. vGauge offers engine performance data logging, system setup and user programmable screen design
- ✓ Gauges and Switches can be displayed and controlled from one or more displays using scrolling page format
- ✓ Compatible with all vGauge displays, Windows PC's, Java enabled devices
- ✓ User defined gauge labels (multiple languages) and sensor types
- ✓ User defined downloadable sensor calibration tables (virtually unlimited)
- ✓ Water resistant ABS housing for long life
- ✓ Virtually unlimited sender interface ( Fluid, Pressure, Temp, Volt, Pulse)
- ✓ 3 Pulse inputs and 12 digital gauge functions or 16 gauge functions
- ✓ User selectable mix and match screen layouts offering dials, bar graphs and text
- ✓ "Touch Screen Scrolling" feature for instant access to 8 screen formats (with vGauge and vSwitch displays)
- ✓ Modular design for easy upgrades and expansion using optional accessories
- ✓ Serial and USB ports for data logging to PC, software upgrades, system enhancements

## Dimensions



## vGauge Remote Optional Accessories

- ❖ vSwitch: 12 Channel water resistant electrical switch module
- ❖ VGBT: Wireless Bluetooth adaptor. View data on other BT enabled display's and Smartphone's
- ❖ VGENET: Wired Ethernet (with web server) for remote viewing from any internet or local connection
- ❖ VGWIFI: Wireless Wi-Fi (with web server) for remote viewing from any internet or local connection
- ❖ VGNMEA2K: NMEA2000 Interface for bridging engine sensor data to compatible devices such as GPS
- ❖ vGauge "C" series display's: 8.4" . 5.7" and 4" color touch screens add real time instrument viewing in multiple locations on your vessel.
- ❖ Extended length serial RS232 cables (300 feet)



## vSwitch Remote Sealed Digital Switch

**vSwitch Remote** is a multi-function digital switch that replaces mechanical switches in automotive and other applications. vSwitch provides sealed digital control over generator starting, levelers, water pumps, radios, lighting, wipers, environmental controls, water and more in a compact water resistant design. The wireless Bluetooth and Wi-Fi option supports most formatting. Switch status can be transmitted, controlled and displayed on display devices in multiple locations simultaneously. The network interface options allows all switches to be remotely controlled via **Chetco Digital** color Touch screens, PC based applications, or other devices.

### **vSwitch Remote**

is housed in a solid ABS water-tight box measuring 6.762" wide x 2.28" tall x 2.5" deep.

### **vSwitch Remote Features**

- ✓ 12 function digital switch (with optional wireless interface)
- ✓ Switches and Gauges can be displayed and controlled from one display or multiple displays using touch activated screens
- ✓ User controlled command status via serial ports
- ✓ 15 Amp relay on each circuit
- ✓ Remote control and status viewing on Windows PC, PDA or Chetco Digital color display
- ✓ Sealed water resistant design
- ✓ User defined switch labels (multiple languages) and display positions
- ✓ Ethernet, Bluetooth and Wi-Fi wireless data transmission option available

### **vSwitch Remote Optional accessories**

- ✓ vGauge: Remote gauge interface module for viewing 16 gauge readings
- ✓ VGBT: Wireless Bluetooth adaptor. View and control switch on BT enabled display's, PC's and Smartphone's
- ✓ VGWIFI: Wireless Wi-Fi (with web server) for remote viewing and switch control from any internet or local connection. Control switch functions from onboard, home or anywhere there is internet access
- ✓ VGNMEA2K: NMEA2000 Interface for bridging to compatible devices
- ✓ vGauge "C" series display's: 8.4", 5.7" and 4" diagonal color touch screens add real time instrument viewing in multiple locations on your vessel

#### vSwitch Remote



Output to single or  
multiple displays



or



#### Optional Display



# vGauge G12Ci Integrated Digital Gauge Cluster

**vGauge G12Ci** is a multi-function color digital gauge panel designed to provide full engine instrumentation in one compact unit. It's advanced sunlight readable color "Touch Screen" replaces virtually all analog gauges in automotive applications. View a variety of performance parameters such as **speedometer, tachometer, rpm, oil pressure, engine temperature, boost pressure, O2, fuel pressure, fuel level, voltmeter, main and auxiliary battery** and more in a compact water resistant design.



*Touch the screen*



*Change the view*

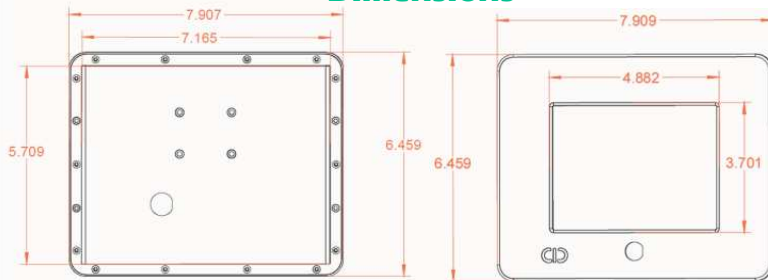
*Dozens of themes to choose or easily custom design your own*



## vGauge G12Ci Features

- ✓ **vGauge G12Ci** : 1 Tachometer and 5 digital gauge functions
- ✓ **vGauge G12Ci Pro**: 2 Tachometer and 12 digital gauge functions
- ✓ Easy installation, use existing senders and wiring or add new senders to expand instrumentation
- ✓ Up to 8 gauge screens can be viewed using "Touch Screen Scrolling" to show data in a wide range of user defined graphical formats
- ✓ Included vDash Software interfaces all vGauge products for engine performance logging, system setup, and user programmable screen design
- ✓ Large 5.7" QVGA color graphics, sunlight readable LCD display
- ✓ Night screen setting for easy low light viewing
- ✓ Wide range of text and font sizes for easy high resolution viewing of 3D graphics
- ✓ Water resistant ABS housing for long life
- ✓ Virtually unlimited sender interface allows monitoring of all automotive equipment
- ✓ User selectable mix and match screen layouts offering dials, bar graphs, and text gauges
- ✓ Modular design for easy upgrades and expansion using optional accessories
- ✓ RS232 Serial port for data logging to PC, software upgrades, and system enhancements

## Dimensions



## vGauge G12Ci Options

- ❖ VGBT: Wireless Bluetooth adaptor
- ❖ VGWIFI: Wireless Wi-Fi (with web server)
- ❖ VGENET: Wired Ethernet (with web server)
- ❖ VGNMEA2K: NMEA2000 Interface

# vGauge G12i

## Integrated Digital Gauge Cluster



Display shown with optional aluminum bezel

### Entry level pricing,

**vGauge G12i** replaces existing analog and digital gauges in a compact sealed unit. **vGauge G12i** is based on an advanced large format graphic LCD panel which can display gauges in a variety of instrumentation formats. Six graphic display modes are available to create a truly virtual dashboard on each of eight pushbutton accessible screens. The monochrome LCD display is easily readable in bright sunlight and the white LED backlight makes low light viewing standout. **vGauge G12i** is also available with a Blue Screen for interior applications.

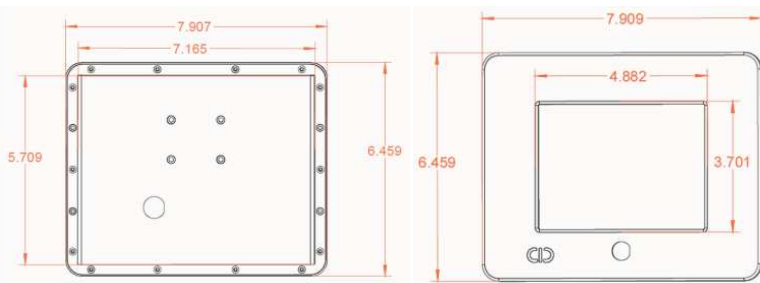
### Push a button – Change the view



### vGauge G12i Features

- ✓ Included vDash Software interfaces all vGauge products for engine performance logging, system setup, and user programmable screen design
- ✓ Large 5.7" diagonal sunlight readable monochrome graphic LCD display
- ✓ White LED backlight makes low light viewing standout
- ✓ Unlimited text and font sizes for easy high resolution viewing of graphics and text
- ✓ Water resistant ABS housing for long life
- ✓ Virtually unlimited sender interface provides display of any performance function
- ✓ 1 Tachometer and 5 digital gauge functions
- ✓ User selectable mix and match screen layouts offering dials, bar graphs, test gauges
- ✓ "Push button scrolling" feature for instant access to 8 screen formats
- ✓ Modular design for easy upgrades and expansion using optional accessories
- ✓ RS232 Serial port for data logging to Windows PC, software upgrades, and system enhancements
- ✓ **vGauge G12i** is sealed to the environment, housed in a solid ABS water-tight case measuring 7" x 6" x 1.55" deep it fits easily into most dash configurations
- ✓ Flush or gimbal mount **vGauge G12i** when space is at a minimum and exposed to the elements

### Dimensions



### vGauge G12 Options

- ❖ VGBT: Wireless Bluetooth adaptor
- ❖ VGWIFI: Wireless Wi-Fi (with web server)
- ❖ VGENET: Wired Ethernet (with web server)
- ❖ VGNMEA2K: NMEA2000 Interface



# Senders and Sensors

The most common senders are listed for sale below. vGauge works with virtually all senders including FloScan. Call for items not listed below.



❖ **Fuel Flow Sender 1-30GPH, \* Requires 2 for fuel injection and diesel**



❖ **Inductive Flywheel Pickup for Tachometer**



❖ **Hall Effect Current sender**  
 +/- 50 Amps 5 volt input Manufacture # AMP100  
 +/- 100 Amps 5 volt input Manufacture # AMP200



❖ **Exhaust Gas Temperature Sender**  
 80-1800 degrees F 1/8"-27 NPT threads K-type thermocouple



❖ **Wideband Bosch O2 sensor with amplifier**  
 7-20 AFR 12 volt input Manufacture # LC-1



❖ **VDO style Temperature Sender**  
 250 degrees F 1/8"-27 NPT threads Manufacture # 323-095  
 400 degrees F 1/8"-27 NPT threads Manufacture # 323-086  
 250 degrees F 1/2"-14 NPT threads Manufacture # 323-419



❖ **VDO style Pressure Sender**  
 0-150 PSI 1/8"-27 NPT threads Manufacture #360-004  
 0-80 PSI 1/8"-27 NPT threads Manufacture #360-003  
 0-30 PSI 1/8"-27 NPT threads Manufacture VDO #360-043



❖ **VDO style Fuel Tank Sender**  
 2-1/8" SAE bolt circle for tank depth 6" - 23" Manufacture # 226002



❖ **MAP/Boost Sender**  
 30PSI - 30 in Hg 12 volt input Manufacture # ODYR-09



Smartphone



vGauge Touch Screen Display



Windows PC

# vGauge and vSwitch Optional Adapters

## vGauge VGN2KS NMEA 2000 Interface Adapter



Allows any existing engine data on NMEA 2000 bus for Display

Converts analog sensor data to NMEA 2000

Supports up to 3 engines in a single unit

Engine data ,Fluid, Pressure, Temp, Volt, Pulse

Supports PGNs 127488, 127489, 127505, 127508

8-Pin Coaxial to 5-pin Device Net

Windows XP/Vista compatible



**VGN2KS** is a wired NMEA 2000 interface adapter for **vGauge Remote** sensor units that allows connection of **vGauge** serial ports to NMEA 2000 bus. The device plugs into serial port and delivers real-time sensor data over the NMEA 2000 network to multiple display heads. The adapter works with vDash application on Windows PC to enable real-time display and data logging from **vGauge-Remote** sensor units..

**VGN2KS** allows you to use **vGauge Remote** interface unit as a bridge between analog sensor data and digital displays on the NMEA 2000 Network. The 16 possible analog inputs are calibrated via downloadable sensor tables to allow for a virtually unlimited combination of instrumentation choices. A single unit can support up to three engines with RPM, Temp, OIL Pressure, Battery Voltage, and Fuel levels. Once on the network, all data can be viewed from multiple locations.

### Serial to ENet



VGENET

**VGENET** is a wired interface adapter for **vGauge Remote** sensor units. It features a built-in Web Server. Adapter allows full access to all vGauge functions over any standard Internet connection

**VGENET** plugs into **vGauge Remote** serial port and delivers real-time sensor data over wired Ethernet up to 300 feet. When connected to a Internet router, remote control is possible just about anywhere in the world. The adapter works with vDash application on Windows PC to enable real-time display and data logging.

**VGENET** comes with a full function Web Server that can store up to 1.2 MB of pages and supports JAVA Applets. These features allow **vGauge Remote** to be deployed as a Web-based remote sensor accessed via any Internet Browser to display real-time data. Offering support for a full set of networking protocols, **VGENET** is easy to set up and manage with supplied configuration software. Simple DHCP management of IP addresses and Telnet login round out the feature set.

### Serial to WiFi



VGWIFI

**VGWIFI** is a wireless interface adapter for **vGauge Remote** sensor units that features a built-in Web Server. Adapter allows full access to all vGauge functions over any standard Internet connection

**VGWIFI** plugs into **vGauge Remote** serial port delivering real-time sensor data over wireless Ethernet up to 300 feet. When connected to a Internet router, remote control is possible just about anywhere in the world. The adapter works with vDash application on Windows PC to enable real-time display and data logging.

### Serial to Bluetooth



VGBT

**VGBT** is a wireless interface adapter for vGauge Remote sensor units. It allows connection of vGauge Serial master port to Bluetooth radio. This adaptor plugs into USB port and delivers real-time sensor data over wireless Bluetooth up 300 feet. The adapter works with vDash application on Windows PC to enable real-time display and data logging.

**VGBT** allows you to use vGauge Remote serial ports for both Display Heads, and Host PC connections. Built-in electronics translate and regenerate serial signals so they can be used by Bluetooth enabled devices such as Laptops, PDAs, and Cell Phones.