



# GWN Series

## Wall Mounted Platform for Gas Sensors

### Product Overview

The GWN Series wall mounted gas platform converts gas sensor readings into a signal that is compatible with building control sensors. To operate, the GWN must be used with a Veris AG Series gas sensor (sold separately). The GWN board has a connector for mounting a single AG sensor, and this sensor can be replaced at any time without removing the GWN from its installed location. Simply remove the GWN cover, replace the AG sensor inside, and reinstall the cover (see the installation guide for the AG sensor for more information). The GWN offers multiple output options: 0 to 5 Vdc and 0 to 10 Vdc with relay, 4 to 20 mA with relay, or relay only. To maintain accuracy, keep all vents free of dust and debris. The GWN is warranted for a period of five years.

### Product Identification

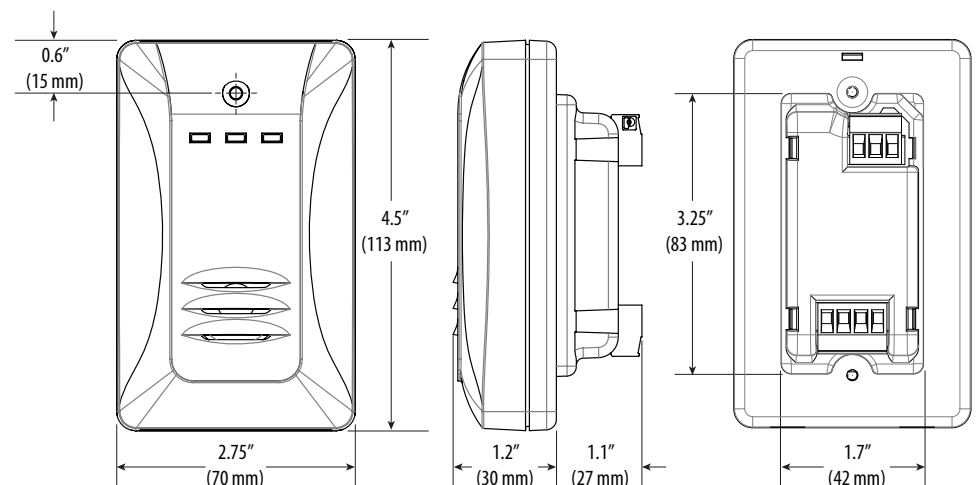
<b>Output</b>	<b>Housing Color</b>	<b>Example:</b> <b>GWNMXXW</b>
GWN		
V = 0 to 5 Vdc/0-10 V (selectable)	Blank = Black	
M = 4 to 20 mA	W = White	
1 = Relay only		

### Specifications

<b>Input Power</b>	15 to 30 Vdc/24 Vac $\pm 20\%$ , Class 2, 50/60Hz, max. 60 mA
<b>Relay Contact Ratings</b>	1 A/30 Vdc, Normally Open
<b>Operating Temperature Range</b>	-20 to 50 °C (-4 to 122 °F)
<b>Operating Humidity Range</b>	0 to 90% RH non-condensing
<b>Terminal Block Wire Size</b>	30 to 12 AWG
<b>Terminal Block Torque</b>	0.5 to 0.6 N-m (0.37 to 0.44 ft-lb)
<b>Protection Class (self-evaluated)</b>	IP20
<b>Agency Approvals</b>	Intertek ETL Listed to UL 61010-1

The GWN operates only when an AG Series gas sensor is installed (sold separately). Accuracy, sensitivity, setpoints, and measurement range are dependant on the AG Series sensor connected to the GWN platform. See the AGxx sensor installation guide for details.

### Dimensions



## Regulatory Information

### NOTICE

- The product is a Class 2 (low voltage - limited energy) device.
- The product is not intended for life or safety applications.
- Do not install the product in hazardous or classified locations.
- Read and understand the instructions before installing the product. Follow the instructions during installation.
- Turn off all power supplying equipment before working on it.
- Do NOT depend on the product for voltage indication.
- Products rated only for basic insulation must be installed on insulated conductors.
- The installer is responsible for conformance to all applicable codes and regulations.

If this product is used in a manner not specified by the manufacturer, the protection provided by the product may be impaired.

No responsibility is assumed by the manufacturer for any consequences arising out of the use of this material.

Control system design must consider the potential failure modes of control paths and, for certain critical control functions, provide a means to achieve a safe state during and after a path failure. Examples of critical control functions are emergency stop and over-travel stop.

### ⚠ WARNING

#### LOSS OF CONTROL

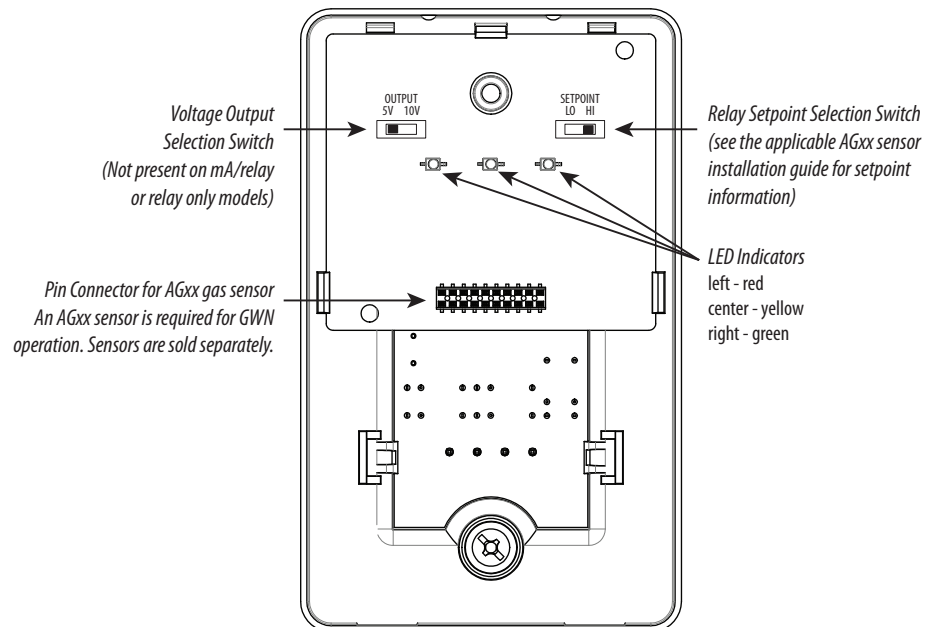
- Assume that the system will reach a safe state during and after a control path failure.
- Separate or redundant control paths must be provided for critical control functions.
- Test the effect of transmission delays or failures of communication links.<sup>1</sup>
- Each implementation of equipment using communication links must be individually and thoroughly tested for proper operation before placing it in service.

**Failure to follow these instructions may cause injury, death or equipment damage.**

<sup>1</sup>For additional information about anticipated transmission delays or failures of the link, refer to NEMA ICS 1.1 (latest edition). *Safety Guidelines for the Application, Installation, and Maintenance of Solid-State Controls* or its equivalent in your specific country, language, and/or location.

For use in a Pollution Degree 2 or better environment only. A Pollution Degree 2 environment must control conductive pollution and the possibility of condensation or high humidity. Consider the enclosure, the correct use of ventilation, thermal properties of the equipment, and the relationship with the environment.

## Product Diagram



The voltage output selection switch is only available on voltage output models. For mA/relay output and relay only models, this space is empty.

Use the relay setpoint selection switch to select either the high or low levels of the low setpoint. These values vary among the available AGxx sensors. See the applicable AGxx sensor installation guide for more information about relay setpoint options.

The LED indicators allow determination of device status at a glance. The GWN includes a light blocking insert that can be set in place of the light pipes if this visibility is not desired.

## LED Blink Codes

LED	Description
Yellow	<ul style="list-style-type: none"> <li>Off during normal conditions.</li> <li>On solid when the low setpoint is reached.</li> <li>1 flash every 10 seconds if possible sensor damage is detected.</li> <li>2 flashes every 10 seconds if the sensor requires replacement.</li> <li>4 or more flashes every 10 seconds if internal problems are detected, such as if the unit needs servicing or if the operating temperature is out of range.</li> </ul>
Green	<ul style="list-style-type: none"> <li>On solid during normal operation.</li> </ul>
Red	<ul style="list-style-type: none"> <li>Off during normal conditions.</li> <li>On solid when the high setpoint is reached.</li> <li>Flashes continuously when the sensor reading is over range.</li> </ul>
All LEDs	<ul style="list-style-type: none"> <li>Flash once when the device is initially powered.</li> <li>Flash while the platform is auto-resetting, such as when a sensor is installed.</li> </ul>

## Relay Contacts

Unit Condition	Low Setpoint Relay	High Setpoint Relay	End-of-Life Relay
OFF	Closed	Open	Open
ON (everything OK)	Open	Open	Open
ON (inoperative)	Closed	Closed	Closed
ON (low setpoint reached)	Closed	Open	
ON (high setpoint reached)	Closed	Closed	
ON (end of life reached)			Closed

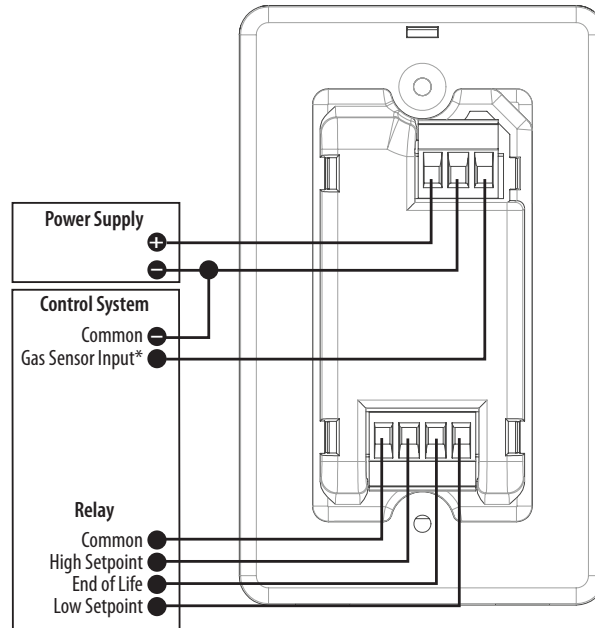
## Installation



Observe precautions for handling static sensitive devices to avoid damage to the circuitry that is not covered under the factory warranty.

1. Disconnect and lock out all power supplies before beginning the installation.
2. Choose a location on a wall in the area to be monitored. Install the unit on a standard electrical box centrally, near main traffic paths but away from outside air vents and excessive drafts.
3. Remove the front cover of the GWN unit, and set it aside.
4. Wiring terminals are located on the back of the unit. Determine whether these terminals fit into the electrical box chosen for the installation. In the case of some electrical boxes, such as weatherproof style boxes, the GWN may not make a snug fit against the box. If this happens, use the Veris AA66 Foam Gasket Kit accessory to improve the fit (sold separately).
5. Run wires through the back of the electrical box and wire the GWN as shown.

## Installation (cont.)



*\* Not available on relay only models.*

6. Mount the GWN on the box. Use the two mounting holes on the unit and the included #6 screws. The wiring terminals must face into the electrical box, with the board facing outward.
7. Install the AGxx Series gas sensor according to the directions included with the sensor.
8. Adjust the selection switches as needed. Set the voltage output switch to either 0-5V or 0-10V if using a voltage output model. If the AGxx sensor has a selectable low setpoint value, use the setpoint selection switch to choose the higher or lower of the options. High setpoint values are fixed for all AGxx sensors.
9. If desired, replace the LED light pipes with the black plastic light blocking insert (included with the GWN). The light pipes are located inside of the front cover.
10. Replace the front cover. Reconnect power.