

Omni-Insights

Viper Kit

Good Things Come in Small Packages

Just like its namesake, the OmniSite Viper is diminutive yet mighty. This is the newest and smallest addition to the OmniSite family of products. Introduced in the fall of 2010, the Viper Kit is a revolutionary product that encompasses several new features unavailable on our other units.

The Viper comes in a kit with all the items necessary for installation. Included in the kit are **two current switches, receptacle plug, sealite conduit, conduit fitting, 50' high level non-mercury float, black OmniSite Sharpie, pre-connected wiring harness, magnetic key, NEMA 4X enclosure, washers, locknuts, and bolts.**

The Viper Kit comes with a low voltage board with five digital inputs and one optional analog input. When purchasing a Viper Kit and installing it straight out of the box, a customer can monitor high wet well level, power failure, and battery failure alarm and return to normal. In addition, the Viper can calculate pump on/off cycles and pump runtimes.

The beauty of this device is its simplicity. Within minutes, a customer can install and configure the unit. All configurations of the unit are done on the GuardDog web-interface. This allows operators to make configuration changes from the convenience of their office or smartphone. Once changes are made on the website, the configurations are sent over-the-air to the unit and are updated. This eliminates the need to drive out to remote lift stations to make changes. In case of a natural disaster, the unit also has the capability to call out to the customer directly in case it cannot connect to the OmniSite servers.

Increased user-friendliness in features, configurations, and installation make this unit worth the second look. In addition, this unit is priced affordably for even the smallest of budgets. Check out our [website](#) for additional details and product features.



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Viper Kit Customer: [Douglasville-Douglas County Water and Sewer Authority, Georgia](#)



The Viper Kit with its accessories

Why did you choose the Viper Kit?

We looked at several different options and we chose this one because of price, ease of use, and functionality.

How easy was it to install and configure the Viper Kit?

Installation was rather easy, and I like the over-the-air configuration a lot.

Would you recommend the Viper Kit to other municipalities?

I would highly recommend it to other municipalities. The quality is good, and service has been great.

Tech Tip: Check the backup battery routinely to ensure performance when needed.

Summary of Backup Battery Feature:

OmniSite units that are powered by 120VAC include a backup battery. When power is lost, the battery is designed to keep the unit powered and running for up to 4 hours. This is typically enough time to transmit a Power Loss alarm and any inputs that go into alarm, while still in power loss.

Problem:

If the backup battery is not charged up, it will cause the unit to shut down, and it will not transmit its Power Loss alarm or any subsequent alarms. It can appear that the battery is charged to 13.2V and that it will be ready to perform, but the voltage displayed in the unit is an 'unloaded' voltage value (battery voltage while the unit is not drawing from the battery). Or it may report in GuardDog that the voltage is above 12V, but again, that is the measured 'unloaded' battery voltage.

Solution:

Routinely conduct a backup battery test on the unit at the station 2 to 4 times a year. Verify that the battery is being fully charged, and that it stays charged long enough to keep the unit running, long enough to transmit Power Loss alarm and other alarms for several hours.

The Test:

1. With the unit powered, check the Battery Voltage in the unit's display menus (Diagnostics --> RTU Status --> Battery) This voltage value is the 'unloaded' battery voltage .
2. Then, remove the AC power from the unit. (Either switch off the circuit at the panel, or unplug the 3-prong power plug in the bottom of the unit.)
3. When AC power is removed, observe the Battery Voltage in the display. It should drop a little, and then level to somewhere around 12.3V. The unit should remain powered, and it should transmit the Power Loss alarm (unless the time delay for this alarm is set for longer than the 60 seconds default setting). This voltage value is the 'loaded' battery voltage (battery voltage while the unit is drawing from the battery).
4. If the unit's battery voltage stays above 12.2V during the test, the battery passed the test. If the unit goes dead during this test, the battery failed the test, and it should be replaced.

GuardDog Updates: Power Suppress Feature

A new feature has been added to [GuardDog](#). Under *Setup*, then *Device Setup*, note a new column labeled *Pwr Suppress*.

Check or uncheck the box in this column to enable or disable the Power Suppress feature for each input. When Power Suppress is enabled, the notifications associated with the input will be suppressed when primary power is not present. The purpose of this feature is to minimize the number of notifications that an operator might receive when primary power is lost. The inputs will show up in alarm on GuardDog, but notifications for both *Alarm* and *Return to Normal* state changes will be suppressed.

For this feature to work properly, the unit must also be configured properly. The primary power loss time delay must be shorter than the time delay for the inputs enabled with *Pwr Suppress*. To change a unit's primary power loss time delay on the unit, go to *Enter Setup*, then *Setup Digital Inputs* and scroll to the bottom of the list. Changing the time delay will ensure that the unit reports a power loss and halts notifications on any inputs where *Pwr Suppress* is enabled (check-marked).

Question of the Quarter

How comfortable would you feel installing an OmniSite product?

-  Very comfortable
-  Somewhat comfortable
-  Terrified

Share feedback with us on one of our social media sites.

