

TrueGuard 2[™] Kohler DEC3000 Modbus Installation Guide

TrueGuard 2™ is for use on 12v systems only.

- Unpack the monitor and antenna. The data/power cable will be attached to the monitor. This cable includes wires to power the monitor as well as wires for alarm inputs, relay outputs and analog inputs. Take a moment to inspect all components to verify there is no shipping damage.
- 2. Place the antenna vertically on the roof of the generator and route the antenna cable into the area of the generator control. The antenna used for transmitting must be installed to provide a separation distance of at least 20 cm from all persons and must not transmit simultaneously with any other antenna transmitters. BE SURE to provide a drip loop lower than the monitor to keep water from running down the antenna cable into the monitor connection.
- 3. Attach the monitor via its magnetic feet, on top of the engine controller or other appropriate location. Horizontal surfaces are best, but the unit may be mounted vertically or even upside down if necessary. Note: If mounted vertically, install the monitor with the cables down to prevent water from entering the enclosure.
- 4. Route the data/power cable through the cable entry on the bottom of the generator control.
- 5. Red wire connection to Battery +; Black wire connection to Battery -
- 6. The monitor can connect to the DEC3000 via an optional basic relay kit that could be used with a hardwired connection, or through a 2-wire (RS485) Modbus connection. The Modbus connection offers greater diagnostic capabilities with the OmniMetrix system.
- 7. To utilize the Modbus capabilities of the DEC3000, connect the OMN white (Data+) and green (Data-) wires to connector P21 as shown in the photo. If a Kohler Annunciator is already connected to this block, you will have to choose between the OmniMetrix monitor and the annunciator. The DEC3000 will not support both simultaneously, possibly requiring hardwire connection with the relay kit.
- 8. Attach the antenna cable to the front of the monitor and tighten thumb tight.
- Allow 15 minutes for the monitor to log into the network and then call OmniMetrix at 770-209-0012 to confirm installation. Access to machine data is through the OmniView® web interface at_ www.omnimetrix.net. Contact OmniMetrix for login instructions and web training.



Data/Power Cable



Kohler DEC3000 Controller



DEC3000 Modbus (RS485) Connection





LED Behavior:

The BLUE LED will illuminate at boot up (stay on). The LED will start blink rapidly, on/off every 1/2 second, once the modem is connected to an available tower. The LED will begin to blink more slowly, three seconds on, three seconds off, once the modem has connected to the OmniMetrix server. Note: The BLUE LED is an indication of network service. If it continues to stay illuminated (on), please check the SIM card, antenna, and signal strength.

The Red LED illuminates approximately 20 seconds after the Blue LED illuminates. A solid Red LED indicates the unit is trying to log into our server.

After approximately 20 seconds, Red LED turns off and the Green LED illuminates for 3 seconds. This indicates the unit has logged into our server.

The Red LED or Green LED flashes after login: Short Green LED flashes indicate the monitor is getting data; Long flashes of the Red LED indicate failure.

Signal strength: LED signal strength indication is provided at login and routinely during operation, using the Red & Green LED's as follows:

- 1. The Red & Green LED's flash rapidly for 2 seconds to indicate the beginning of the "Signal Strength" routine.
- 2. Next, the LED(s) will stay fully illuminated 2 seconds to indicate the current signal strength:
 - a. Solid Red LED only = below 10
 - b. Solid Red & Green LED's = $10\sim60$
 - c. Solid Green LED only = greater than 60.
- 3. To complete the Signal Strength cycle, the Red & Green LED's flash rapidly again for 2 seconds, then stop (end of cycle).

