

## **TrueGuard-2<sup>™</sup> Cummins PCC2100 Installation Guide**

## TrueGuard-2<sup>™</sup> is for use on 12v systems only.

- Unpack the monitor and antenna. The integrated 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 <u>vertically</u> 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 integrated data/power cable into the generator control enclosure.
- 5. Instructions for wiring the monitor can be found in the table on the following page.
- 6. TB1 terminals 9, 11, 13, and 15 should be daisy-chained together and connected to ground on TB1 Terminal 20 (If connections already exist on these terminals, contact OmniMetrix Technical Support before continuing installation).
- 7. 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 <a href="https://www.omnimetrix.net">www.omnimetrix.net</a>. Contact OmniMetrix for login instructions and web training.

TrueGuard-2 System





PCC2100 Controller

TrueGuard Cummins PCC2100 Wiring Table		
OMN WIRE	FUNCTION	TERMINATION
Red	Power In (Generator Battery +)	TB1 - 17
Black	Ground	TB1 - 20
Orange	Generator Running	TB1 - 14
Blue	Common Warning	TB1 - 8
Violet	Not in Auto	TB1 - 12
Gray	Common Shutdown	TB1 - 10
White/Yellow	Remote Start/Stop	TB1 - 1
White/Brown	Remote Start/Stop	TB1 – 22
Alarm Grounds	Daisy chain Terminals 9, 11, 13, and 15 and connect to Terminal 20 Ground.*	

<sup>\*</sup>If connections already exist on these terminals, contact OmniMetrix Technical Support before continuing installation.

## **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 =  $10^{60}$
  - 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).

If you have any questions, please call OmniMetrix Tech Support at 770-209-0012 or email at techsupport@omnimetrix.net.

