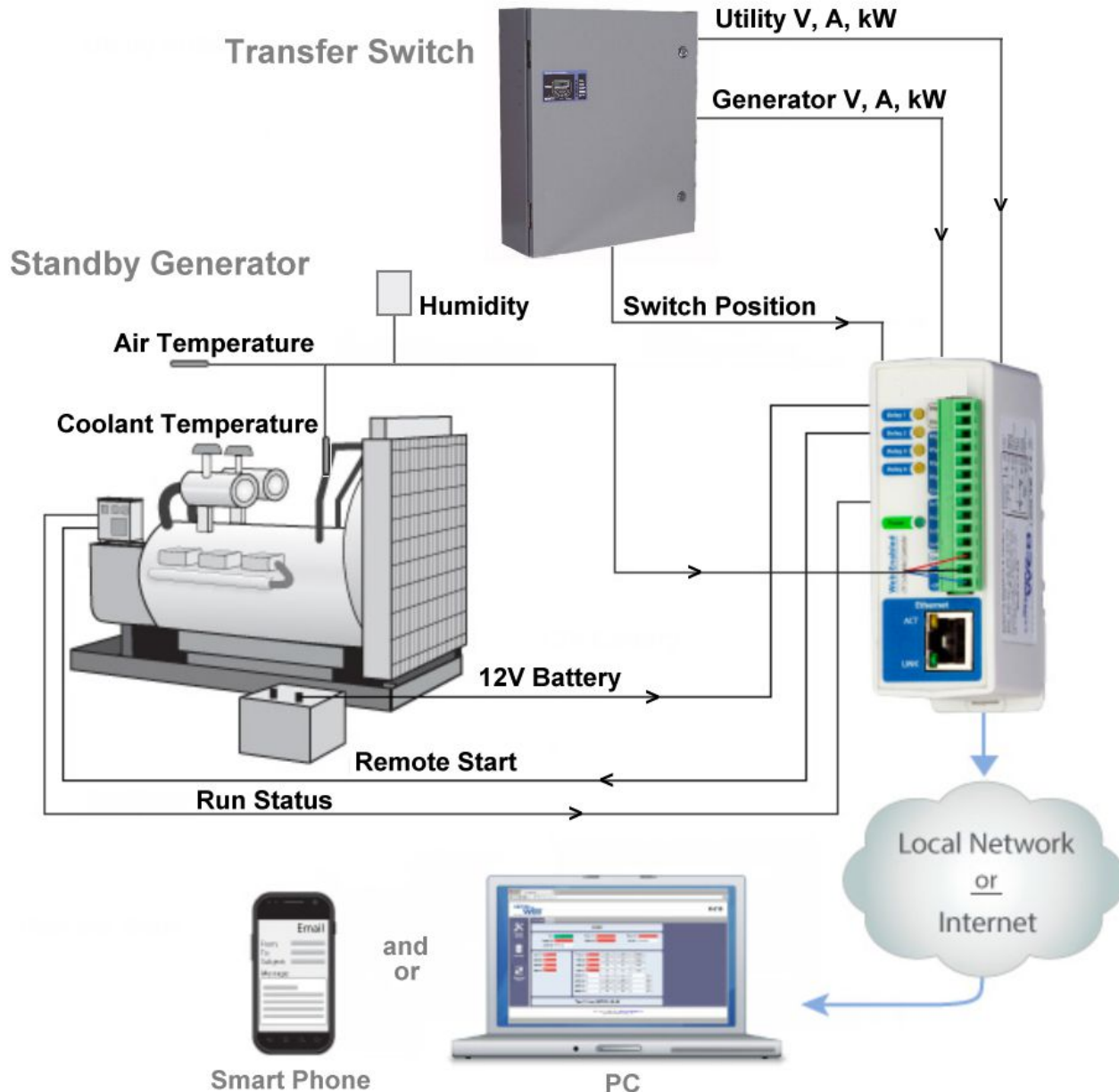


Standby Generator System Remote Monitoring & Control

Remotely start a generator and monitor its run status, temperature, power output and more using a standard web browser!

Remotely start and stop generator, control transfer switch, monitor utility power status, and generator power status. In addition, monitor generator's engine block, coolant, and ambient temperatures, and fuel tank level. This system can be retrofit to existing standby power systems since it does not rely on any engine controller.



The above illustration is for demonstration purposes only and does not represent actual wiring. Appropriate sensors and transducers must be added and are not shown.

This controller has a built-in web server that allows you to access the control pages from any location in the world using a standard web browser, computer, or smart phone.

Detailed Explanation

In the above example, a relay in the controller is connected to the generator's start contact for remote generator start/stop. A "Run Status" output signal from the generator is connected to an input of the controller, and temperature sensors are connected to the engine coolant and ambient air for remote monitoring.

Generator 2B			
Outside	78.1 °F	Utility	208 V
Eng Clnt	93.4 °F	Genset	0 V
Inside	83.7 °F	Load	68 kW
ATS Enc1	51.3 °F	spare	
Sensor 5	74.5 °F	Frequency	60 Hz
Humidity	29.8 %RH		
ATS Pos	UTIL		
Genset	OFF	ON OFF	
extVar0	OFF	ON OFF	Set
extVar1	ON	ON OFF	Set
extVar2	15	ON OFF 15	Set
extVar3	ON	ON OFF	Set
Current Time: Tue, 03 May 2014 12:24:40			

Sample screen

Other options are utility and generator voltage monitoring, transfer switch control, and more. All of these parameters can be remotely controlled and monitored using a web browser or email/text alerts can be set up for abnormal conditions. The controller can be used to measure actual values (rather than just on/off status) such as utility and generator output voltage, frequency, current, power, fuel tank level, and more. Virtually any parameter can be measured as long as a transducer is available to convert the analog value to 0-5Vdc.

System is very flexible with user setup screens for customizing the label texts, alarm setpoints and colors on the internal web screen. See sample. In addition, the user can select one or more parameters to be recorded to an internal rolling log file at time intervals as short as every second. This log file can be viewed and downloaded remotely to see event history.



Typical transducers

The controller has a built-in web server and all the data it measures can be viewed using a web browser without any software or app to download or purchase, no subscription to buy, and no programming required for setup and use. Even with this simplicity many advanced features are included the ability to create BASIC scripts, SNMP, peer-to-peer communications, email alerts, and full calendar scheduling.

Common System Options

Logical I/O (select up to 2)

- dry contact input
- dry contact input
- counter input
- counter input
- dry contact output
- dry contact output

Frequency Input 0.2% accuracy (select up to 1)

- frequency input (Hz)
- speed equivalent input (rpm)

Temperature Input (select up to 6)

- digital sensor -67°F to +257°F _____
- digital sensor -67°F to +257°F _____
- digital sensor -67°F to +257°F _____
- digital sensor -67°F to +257°F _____
- digital sensor -67°F to +257°F _____
- digital sensor -67°F to +257°F _____

Analog Inputs (select up to 4)

- ac voltage – single phase source 1
- ac voltage – single phase source 2
- ac voltage – 3 phase source 1
- ac voltage – 3 phase source 2
- ac current – single phase source 1 (Amps)
- ac current – single phase source 2 (Amps)
- ac current – 3 phase source 1 (Amps)
- ac current – 3 phase source 2 (Amps)
- ac power – single phase source 1 (kW)
- ac power – single phase source 2 (kW)
- ac power – 3 phase source 1 (kW)
- ac power – 3 phase source 2 (kW)
- ac power factor – source 1
- ac power factor – source 2
- ac frequency 0.5% (Hz)
- fuel tank level
- dc battery voltage
- other _____

Multiple controllers can be used if more monitoring points are required. More advanced systems also available.