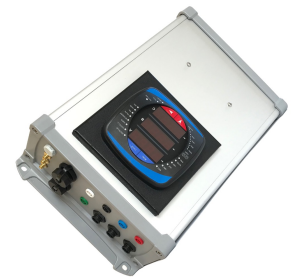
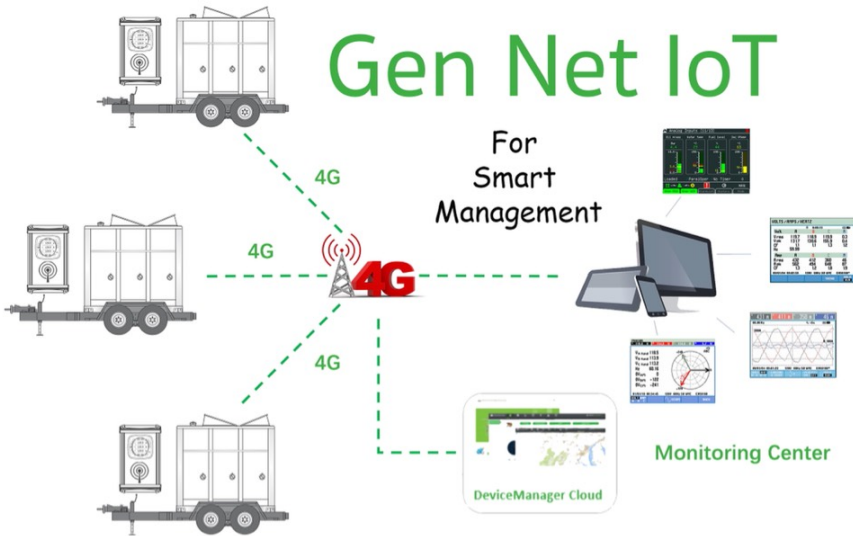


Gen Net IoT

The smart way of managing single or multiple generators



Employing the latest Internet of Things (IoT) technology, Gen Net IoT provides a new level of accessibility to the critical information required to manage generators by delivering it to an operator's phone, tablet or laptop via reliable 4G LTE wireless technology.



Its embedded web server displays comprehensive power quality and engine data using standard internet browsers and allows for device configuration from the browser. To help the operator to interpret the vast amount of information generated by Gen Net IoT, such as current loading, voltage and power levels, power factor, and power quality measurements, the embedded web server presents real time,

historical, and event information in easily understandable browser-style graphic displays. If a generator is equipped with IntelliVision 5, Gen Net IoT will also display critical engine data such as oil pressure, fuel level, and water temperature.

Metered/Monitored Parameters

All Generators

- Volts: L-L, L-N, Avg. L-L, Avg. L-N.
- Phase and neutral currents.
- Power: real, reactive and apparent.
- Frequency.
- Power factor: apparent.
- Energy: real, forward, reverse, sum.
- Demand: peak with date and time.
- % THD.
- Minimum and maximum values.
- Harmonics.
- Individual Harmonics.
- Demand comparisons.
- Phasors.



Email Alarms

- Min/Max phase voltages.
- Max % (-) sequence harmonics.
- Max phase & neutral currents.
- Min/Max frequency (Hz).
- Max % THD.
- Low oil pressure.
- Low fuel level.
- High water temp.

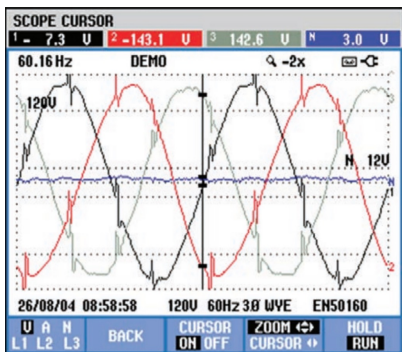
Generators with IntelliVision 5

- Oil Pressure
- Fuel Level
- Water Temp

One Gen Net IoT on its own provides unparalleled access to the critical info required to manage a generator. Multiple Gen Net IoTs in a wireless 4G network, provides the ability to manage multiple generators from a central location. When there is more than one operator, Gen Net IoT enables them to share data and work in shifts. Used alone or as part of a network, each Gen Net IoT offers these benefits:

Real-Time Visualization of Phase Loading

As part of a network, Gen Net IoT enables an operator to direct the loading of multiple generators in a balanced fashion from a central location



VOLTS / AMPS / HERTZ				
	A	B	C	N
Volt				
Vrms	119.7	118.9	119.9	0.3
Vpk	131.7	130.6	155.9	0.4
CF	1.1	1.1	1.3	1.2
Hz	59.99			
Amp				
Arms	432	412	360	46
Apk	562	494	648	87
CF	1.3	1.2	1.8	1.9

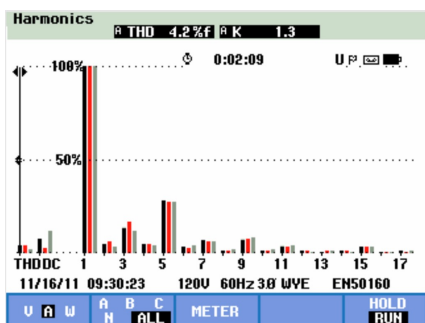
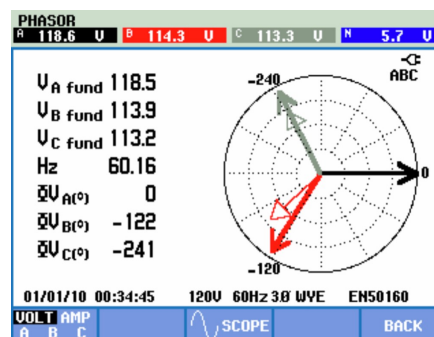
09/01/04 09:02:59 120V 60Hz 3Ø WYE ENS0160*

Real-Time Visualization of Waveform Distortion

For diagnostic purposes, the web server offers a single-cycle waveform display of voltage sags, swells, and transients.

Real-Time Visualization of Voltage Unbalance

To alert operators of a voltage unbalance that can degrade the performance of a generator and connected loads, the web server displays numerical and graphic phasor representations of the voltage of each phase, the average voltage, and the % (-) sequence harmonics.

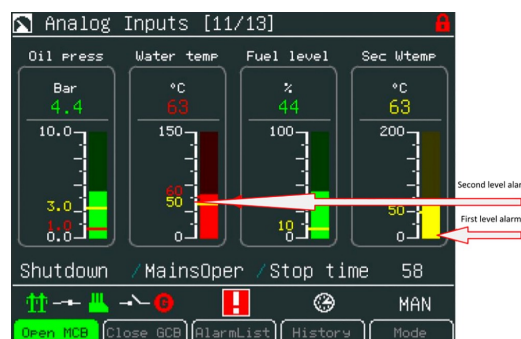


Real-Time Visualization of Harmonic Content

To spot power quality problems, a spectral plot displays the harmonic content of the voltage and current. A detailed table also includes individual magnitudes and angles of current and voltage harmonics at each frequency. Individual and total THD can also be displayed for diagnostic purposes.

Configurable Event Triggers with E-mail Alarms

To alert operators to problems before they get out of hand, Gen Net IoT offers configurable event triggers. Max/Min limits can be set for any measured parameter. If any of the limits are exceeded, Gen Net IoT will dispatch an e-mail alarm alerting the operator of the event.



“Black Box” Data Recording to Aid Diagnostics

So that generator owners and operators can view and analyze data after an event, data is automatically stored on the FTP server for later viewing.