

Auto Test Software

Automated Generator Load Testing,
Performance-Proving and Documentation



Fully User Customizable Main Window

Sizes, colors, window placement, graphs and meters displayed can all be user adjusted.

Simplex AutoTest Software delivers full automation of generator load testing when applied with a load bank system equipped with AutoTest hardware. Simplex AutoTest provides user-definable automated load-test routines, pass-fail analysis, data collection and report generation. Simplex designed and developed the AutoTest Software system specifically for OEM production line test cell use. AutoTest is equally applicable to field testing, performance-proving, commissioning and acceptance of generator sets. AutoTest is intended for use with Simplex resistive and resistive/reactive load banks, either as new equipment or as a field upgrade. AutoTest can also be applied to other brands of load banks when these load banks are equipped with AutoTest hardware.

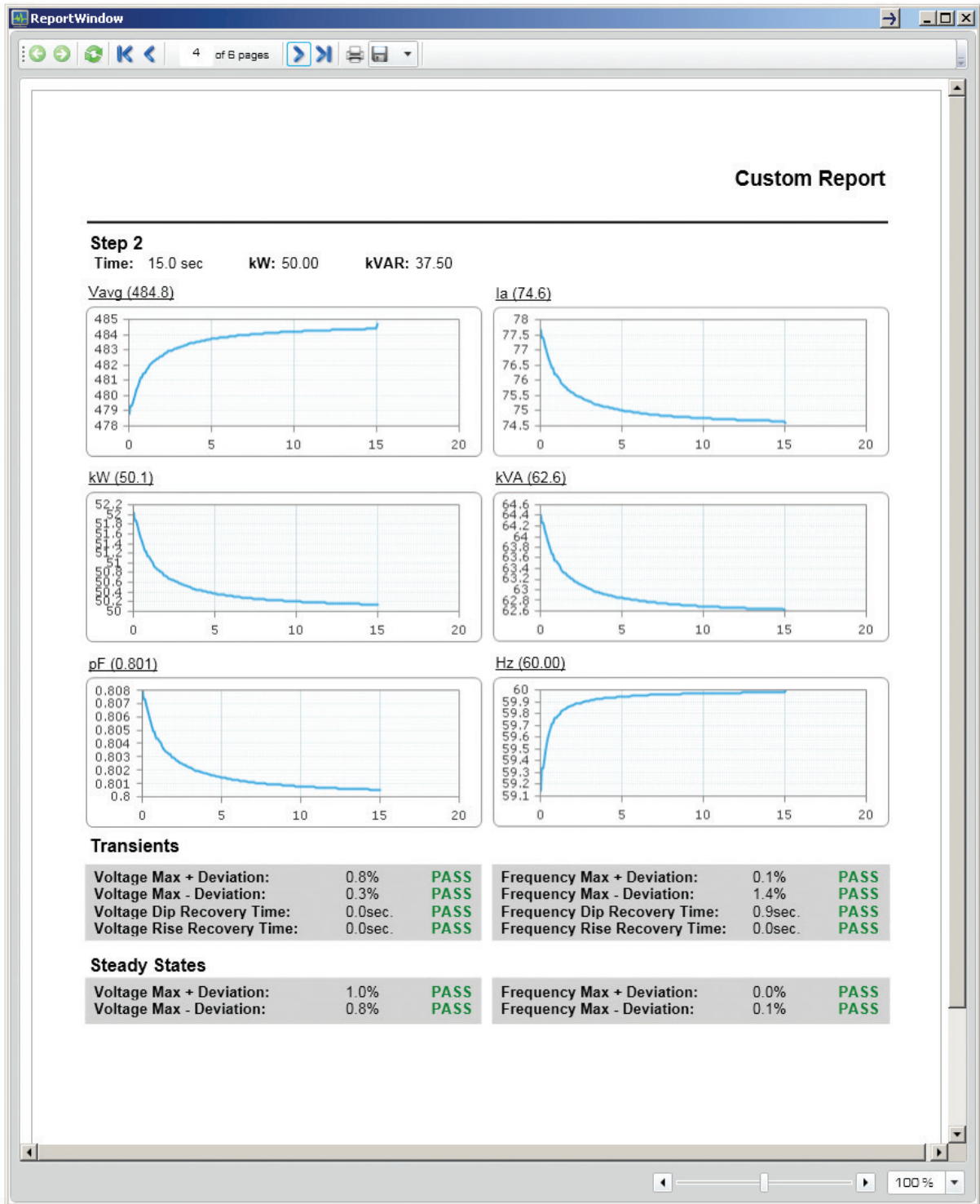
AutoTest runs under Windows XP or Windows 7. AutoTest communicates with the load bank over a dedicated Ethernet system.

AutoTest can be user configured for automated test per specific generator rating, model, serial number or bar-code scan. Test routines can be user defined as KW versus time, KW @ power factor versus time, percent load versus time, etc. Each routine can be saved to memory. Pass-fail performance criteria can be pre-set and saved as either global set points or as specific generator settings. Typical pass-fail criteria are voltage error and frequency error under transient and steady-state loads. Full manual load control is also possible with loads entered as direct entries, as percents, as analog mimic panel switches, or other user configurable interface.

The AutoTest operating screen presents high accuracy digital and analog capture and display of voltage, amperes, frequency, KW, KVAR, power factor. Running time and accumulated time, KW/KVAR-hours, and harmonic analysis are also available.

Engine data can be collected as well from appropriate network devices. This data can be integrated for pass-fail analysis, displayed on the AutoTest main operating screen and reported in the test documentation.

AutoTest can be networked to central management systems and data collection systems for display of values and collection of data. AutoTest equipped load banks can be networked to parallel individual cells to form a larger virtual test cell.



Report Tool – Fully User Customizable Report Generation

Data fields, graphs, pass fail information can be added or removed from the report – Saves to PDF, Excel, etc.

Sample Report

Test Information

| | | | | | |
|-------------------|-----------------------------|------------------|-------------|-------------|-----------------|
| Test Date: | Thursday, November 17, 2011 | Engineer: | John Smith | Bay: | Load Test Bay 1 |
| Customer: | Acme | Job #: | 12345-67-89 | | |

Genset

Model: abc123 **Series:** 123

Rating

| | | | | | |
|-------------------|--------|--------------|--------|-------------------|---------|
| kW: | 300.00 | kVA: | 400.00 | Volts L-N: | 277.00 |
| Volts L-L: | 480.00 | Amps: | 480.00 | PF: | 0.800 |
| Phase: | 3 | Hz: | 60.00 | RPM: | 1800.00 |

Engine

| | | | | | |
|----------------------|--------|------------------|-------------|--------------------|--------|
| Manufacturer: | ABC123 | Serial #: | 98765-43-21 | Model: | 123456 |
| Fuel Type: | Diesel | Governor: | DEF456 | Controller: | HIJ789 |

Generator

| | | | | | |
|----------------------|-------------------|------------------|--------|---------------|-----|
| Manufacturer: | Marathon Electric | Serial #: | 654321 | Model: | 123 |
| Connection: | Delta | Wires: | Other | Leads: | 3 |

Test Settings

Transients

| | | | |
|------------------------------------|-----------|--------------------------------------|-----------|
| Voltage Max + Deviation: | 15.00% | Frequency Max + Deviation: | 15.00% |
| Voltage Max - Deviation: | -5.00% | Frequency Max - Deviation: | -5.00% |
| Voltage Dip Recovery Time: | 5.00 sec. | Frequency Dip Recovery Time: | 5.00 sec. |
| Voltage Rise Recovery Time: | 5.00 sec. | Frequency Rise Recovery Time: | 5.00 sec. |

Steady State

| | | | |
|---------------------------------|--------|-----------------------------------|--------|
| Voltage Max + Deviation: | 2.00% | Frequency Max + Deviation: | 0.50% |
| Voltage Max - Deviation: | -2.00% | Frequency Max - Deviation: | -0.50% |